West Virginia Department of Environmental Protection Division of Air Quality

Earl Ray Tomblin Governor Randy C. Huffman Cabinet Secretary

Permit to Operate



Pursuant to

Title V

of the Clean Air Act

Issued to:

Allegheny Energy Supply Company, LLC Pleasants- Willow Island Power Stations /Willow Island, WV R30-07300005 -2013

> John A. Benedict Director

Permit Number: **R30-R30-07300005-2013**Permittee: **Allegheny Energy Supply Company, LLC**Facility Name: **Pleasants-Willow Island Power Stations**

Permittee Mailing Address: 800 Cabin Hill Drive, Greensburg, Pa 15601

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location: Willow Island, Pleasants County, West Virginia

Facility Mailing Address: P.O. Box 9 (Pleasants Station) / P.O. Box 18 (Willow Island Station),

Willow Island, WV 26134

Telephone Number: 304 665-3200 (Pleasants Station) / 304 665-3100 (Willow Island Station)

Type of Business Entity: LLC

Facility Description: Electric Generation Service

SIC Codes: Primary 4911; Secondary NA; Tertiary NA

UTM Coordinates: Pleasants: 474.49 km Easting • 4357.40 km Northing • Zone 17

Willow Island: 474.13 km Easting • 4357.36 km Northing • Zone 17

Permit Writer: Frederick Tipane

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emissio	on Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
			Pleasants Combustion Sou	rces		
Unit P1	Stack P1	(separate flues in a	Pleasants Unit 1Boiler; Foster Wheeler	1977	6245 MMBtu/hr	ESP1P, Scrubber1P, SCR1P
Unit P2	Stack P2	common stack shell)	Pleasants Unit 2 Boiler; Foster Wheeler	1979	6245 MMBtu/hr	ESP2P, Scrubber2P, SCR2P
Aux Blr PA	Aux E	Blr Stk P1	Pleasants Auxiliary Boiler A; Babcock & Wilcox, Model FM- 120-97	1976	222 MMBtu/hr	N/A
Aux Blr PB	Aux E	Blr Stk P1	Pleasants Auxiliary Boiler B; Babcock & Wilcox, Model FM- 120-97	1976	222 MMBtu/hr	N/A
Gener. PA]	P55	Pleasants Emergency Generator A; Cummins Engine Co. Model # 682FDF4S30FF-W	1976	7.67 MMBtu/hr (1005 Hp, 750 kW)	N/A
Gener. PB]	P56	Pleasants Emergency Generator B; Cummins Engine Co. Model # 682FDF4S30FF-W	1976	7.67 MMBtu/hr (1005 Hp, 750 kW)	N/A
PLS FP-1	PL	S FP-1	Pleasants Fire Pump 1 (215 Hp)	1976	13.2 gal/hr	N/A
PLS FP-2	PL	S FP-2	Pleasants Fire Pump 2 (215 Hp)	2010	14.7 gal/hr	NSPS Tier 3 Cert.
			Pleasants Material Handling S	Sources		
LBRH 1	LE	BRH 1	Lime Barge Receiving Hopper	1976	300 TPH	DC-LBRH
LC-1	I	.C-1	Lime Conveyor from Rec. Hopper to Transfer House and Transfer Points	1976	300 TPH	Full Enclosure, DC-LC1
LCT-1	L	CT-1	Lime Conveyor from Transfer House to Lime Silos	1976	300 TPH	DC-LRT1
LSS-1, LSS-2, LSS-3		1, LSS-2, SS-3	Lime Storage Silos (3)	1976	7500 Tons (each)	DC-LSS1, DC- LSS2, DC- LSS3
LFS-1A, LFS- 1B, LFS-1C, LFS-2A, LFS- 2B, LFS-2C	LFS-10	A, LFS-1B, C, LFS-2A, 3, LFS-2C	Lime Feed Silos (6)	1976	250 Tons (each)	DC-LFS1A, DC-LFS1B, DC-LFS1C, DC-LFS2A, DC-LFS2B, DC-LFS2C

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
Calcilox Bulk Silo	Calcilox Bulk Silo	Calcilox Bulk Silo	1976	3000 Tons	DC-CBSS
SSLS-A SSLS-B	SSLS-A SSLS-B	Sludge Stabilization Lime Silos A&B	1993	250 Tons (each)	DC-SSLSA, DC-SSLSB
SSCS-A SSCS-B	SSCS-A SSCS-B	Sludge Stabilization Calcilox Silos A&B	1976	600 Tons (each)	DC-SSCS
BC-1	BC-1	Barge unloading and Transfer Points, (unload onto BC-1)	1976	3500 TPH	N/A
BC-2	BC-2	Barge unloading to Surge Bin Conveyor and Transfer Points (coal to conveyor)	1976	3500 TPH	Partial Enclosure
RCRU-2	RCRU-2	Rail Car Rotary Unload and Transfer to Vibrating Feeders	1976	2000 TPH	Partial Enclosure
VF3A, VF3B	VF3A, VF3B	Vibrating Feeders (2) and Transfer Points (coal to conveyor)	1976	2000 TPH	Partial Enclosure
RC-1	RC-1	Conveyor and Transfer Points from Railcar Dumper to RC-2 (coal to conveyor)	1976	2000 TPH	Partial Enclosure
RC-2	RC-2	Conveyor and Transfer Points from RC-1 to Surge Bin (coal to surge bin house)	1976	2000 TPH	Partial Enclosure
VF-1	VF-1	Surge Bin, Hopper, Feeder, Transfer Point (to conveyor)	1976	2000 TPH	Partial Enclosure
C-1	C-1	Surge Bin to Breaker House Conveyor and Transfer Point (coal to breaker house)	1976	2000 TPH	Partial Enclosure
CB-A, CB-B	CB-A, CB-B	Breakers (A,B) and Transfer Point (coal to conveyor)	1976	1000 TPH each	Partial Enclosure
BF-1A, BF-1B	BF-1A, BF-1B	Belt Feeder Conveyors / Transfer Point (coal from breakers to conveyor)	1976	1000 TPH each	Partial Enclosure
BPC-1	BPC-1	Breaker (House) Conveyor to Transfer House	1976	1000 TPH	Partial Enclosure
BPC-2	BPC-2	Transfer House Conveyor to Crusher	1976	1000 TPH	Partial Enclosure
VF-2A, VF-2B	VF-2A, VF-2B	Crusher House Vibratory Feeders	1977	750 TPH each	Partial Enclosure
C-2	C-2	Breaker House to Lowering Wells and Conveyor (conveyor and transfer point)	1976	2000 TPH	Partial Enclosure
C-3	C-3	Conveyor to Lowering Well (conveyor and transfer point)	1976	2000 TPH	Partial Enclosure
LW#1, LW#2	LW#1, LW#2	Lowering Wells and Transfer Point (coal to coal pile, conveyor)	1976	750 TPH each	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
PStockpile 2	PStockpile 2	Coal Stockpile (wind erosion, reclaim to conveyor, grading, dozing, pan load)	1976	1,500,000 tons	N/A
C-L1, C-L2	C-L1, C-L2	Conveyor / Transfer Point at Lowering Well base (coal to conveyor)	1976	750 TPH each	Partial Enclosure
C-4A, C-4B	C-4A, C-4B	Lowering Wells to Crusher House (conveyors and transfer point)	1976	750 TPH each	Partial Enclosure
Pcru01, Pcru02	Pcru01, Pcru02	Crusher House Transfer Point	1976	750 TPH each	Partial Enclosure
C-5A, C-5B	C-5A, C-5B	Crusher House to Transfer Tower, Main Plant (conveyor and transfer point)	1976	750 TPH each	Partial Enclosure
C-6A/B, C-7A/B, SC-11A/B, SSC-12A/B, SC-21A/B, SSC-22A/B	C-6A/B, C-7A/B, SC-11A/B, SSC-12A/B, SC-21A/B, SSC-22A/B	Transfer Tower to Main Plant Unit Coal Silos (conveyors and transfer points)	1976	750 TPH each	Partial Enclosure
Fly Ash Silo Unit 1, Fly Ash Silo Unit 2	Fly Ash Silo Unit 1, Fly Ash Silo Unit 2	Fly Ash Silos	1976	55 TPH each	ESP1P, ESP2P
U1A, U1B, U2A, U2B	U1A, U1B, U2A, U2B	Fly Ash Rotary Unloaders	1976	55 TPH each	N/A
Unit 1 Coal Silos, Unit 2 Coal Silos	Unit 1 Coal Silos, Unit 2 Coal Silos	Coal Silos for Unit 1 and Unit 2	N/A	750 TPH each	DC-CS1, DC- CS2
PHaul Road	PHaul Road	Material Haul Roads, Fly Ash and Bottom Ash Haul Roads, Salt and Soda Ash Haul Roads	N/A	N/A	Vacuum Sweeping, Watering, Dust Suppressant
DISPOSAL AREA	DISPOSAL AREA	Common Fly Ash and Bottom Ash Disposal Area	N/A	N/A	N/A
P26	P26	Reagent Storage Tank	2012	170,000 gallons	Mist Eliminator (26C)
P27	P27	Salt Storage Tank	2012	5,482 gallons	None
RC 3630	5E	MerSorb Storage Tank	2015	405 gal	None
RC 8200	1E	S-Sorb Storage Silo (Refined Coal)	2015	218 ton	Bin Vent Filter
RC 8300	2E	S-Sorb Storage Silo Refined Coal)	2015	218 ton	Bin Vent Filter

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
RC 3200	3E	S-Sorb Day Bin	2015	25 tons	Bin Vent Filter
RC 3300	4E	Mitagent Feed Silo	2015	50 ton	Bin Vent Filter
RC 3100	6E	Pug Mill Mixer	2015	1500 tph	None
		Pleasants Gypsum Production	Sources		
PG1, PG2, PG3	PG1, PG2, PG3	F-100, F-200, F-300 Belt Filters to Chute Transfer Points	1999	120 TPH (total for 3)	Partial Enclosure
PG-4	PG-4	Conveyor GC-1 to Dome Transfer Point	1999	120 TPH	Partial Enclosure
PG-5	PG-5	Dome Belt Feeder Transfer Point	1999	400 TPH	Partial Enclosure
PG-6	PG-6	Conveyor BF-1 to GC-2 Transfer Point	1999	400 TPH	Partial Enclosure
PG-7	PG-7	Conveyor GC-2 to GC-3 Transfer Point	1999	600 TPH	Partial Enclosure
PG-8	PG-8	Conveyor GC-2 to Loadout Chute Transfer Point	1999	600 TPH	Partial Enclosure
PG-9	PG-9	Loadout Chute to Barge Transfer Point	1999	600 TPH	N/A
PG-10	PG-10	Conveyor Belt GC-1	1999	120 TPH	Partial Enclosure
PG-11	PG-11	Conveyor Belt GC-2	1999	600 TPH	Partial Enclosure
PG-12	PG-12	Conveyor Belt GC-3	1999	600 TPH	Partial Enclosure
PG-13	PG-13	Oxidation Tank T-100 Vent	1999	75 TPH	N/A
PG-14	PG-14	Oxidation Tank T-200 Vent	1999	75 TPH	N/A
		Willow Island Combustion So	ources		
Unit W1	StackW1	Willow Island Unit 1	1948	619 MMBtu/hr	ESP1W
Unit W2	StackW2	Willow Island Unit 2	1959	1605 MMBtu/hr	ESP2W
Aux Blr W3A	Aux Blr Stk W1	Willow Island Auxiliary Boiler 3A	1989	19.89 MMBtu/hr	N/A
Aux Blr W3B	Aux Blr Stk W1	Willow Island Auxiliary Boiler 3B	1989	19.89 MMBtu/hr	N/A
Emer Gen WA	W39	Willow Island Emergency Generator A (600 Hp, 400 kW)	1974	4.22MMBtu/hr	N/A
WIL FP-1	WIL FP-1	Willow Island Fire Pump 1 (340 Hp)	2007	33 Gal/hr	N/A

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
		Willow Island Material Handlin	g Sources		
GF-C2	GF-C2	Limestone Gravametric Feeder and Hopper, and Transfer Point	1986	40 TPH 300 TPH	Partial Enclosure
BC-3	BC-3	Barge Unloading to Surge Bin (conveyor and transfer point)	1986	3500 TPH	Partial Enclosure
VF-A1, VF-A2	VF-A1, VF-A2	Vibrating Feeders under Railcar Dumper (coal to conveyor)	1976	500 TPH each	Partial Enclosure
BF-1	BF-1	Belt feeder under Surge Bin to BC-4 (conveyor and transfer points)	1986	500 TPH	Partial Enclosure
BC-4	BC-4	Surge Bin to Sample House (conveyor and transfer point)	1986	500 TPH	Partial Enclosure
RCRU-1	RCRU-1	Rail Car Unload and Transfer to Vibrating Feeders	1976	3500 TPH	Partial Enclosure
BC-A	BC-A	Rail Car Dumper to Sample House (conveyor and transfer point)	1976	750 TPH	Partial Enclosure
SHTP	SHTP	Sample System Transfer Point (coal to conveyor)	1949	500 TPH	Partial Enclosure
TC-1	TC-1	Sample House to Surge Bin (conveyor and transfer point)	1976	1000 TPH	Partial Enclosure
No. 1	No. 1	Sample House to Crusher House (conveyor and transfer point)	1949	500 TPH	Partial Enclosure
No. 1a	No. 1a	Crusher Bypass Conveyor and transfer points	2007	500 TPH	Partial Enclosure
Wcru01, Wcru02, Wcru03	Wcru01, Wcru02, Wcru03	Crushers and Transfer Points (coal to conveyors)	1949	500 TPH	Partial Enclosure
Collector Conveyor	Collector Conveyor	Conveyor and Transfer Point (coal from crushers to conveyor)	1976	500 TPH	Partial Enclosure
No. 3	No. 3	Crusher House to BC-B (conveyor and transfer point)	1949	500 TPH	Partial Enclosure
ВС-В	BC-B	Conveyor and Transfer Point (coal to stockpile)	1976	500 TPH	Partial Enclosure
WStockpile 1	WStockpile 1	Coal Stockpile (wind erosion, reclaim to conveyor, grading, dozing, pan load)	1949	100,000 tons	N/A
VF-8	VF-8	Reclaim Feeder and Transfer Points (coal to conveyor)	1976	500 TPH	Partial Enclosure
ВС-С	BC-C	Conveyor and Transfer Point (stockpile to conveyor)	1976	500 TPH	Partial Enclosure
Transfer Conveyor	Transfer Conveyor	Conveyor and Transfer Points (coal to conveyor)	1976	500 TPH	Partial Enclosure

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device*
No. 2	No. 2	To Coal Bunkers from Stockpile or Crusher House (conveyor and transfer points)	1949	500 TPH	Partial Enclosure
No. 2A	No. 2A	Conveyor and Transfer Points (coal to bunkers)	1949	500 TPH	Partial Enclosure
Fly Ash Silo	Fly Ash Silo	Fly Ash Silo (Unit 1 & Unit 2)	N/A	N.A	N.A
Rotary Unloader 1, Rotary Unloader 2	Rotary Unloader 1, Rotary Unloader 2	Fly Ash Rotary Unloaders	N/A	N/A	N/A
WI Coal Bunkers	WI Coal Bunkers	Coal Bunkers for Unit 1 and 2	1949	500 TPH	DC-CB
WI Coal Feeders	WI Coal Feeders	Screw feeder for Units 1 and 2 (Bunkers to boilers)	1949	500 TPH	DC-CF
WHaul Road	WHaul Road	Material Haul Roads, Fly Ash and Bottom Ash Haul Roads	N/A	N/A	Vacuum Sweeping, Watering, Dust Suppressant

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-0071	05/17/1974
R13-0335	09/26/1977
R13-1099	05/09/1989
R13-1559	02/18/1993
R13-2319A	11/08/2007
R13-3082B	June 10, 2016

2.0 General Conditions

2.1. Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	NSPS	New Source Performance	
CAAA	Confidential Business Information	1101 0	Standards	
CEM	Continuous Emission Monitor	PM	Particulate Matter	
CENT	Certified Emission Statement	PM ₁₀	Particulate Matter less than	
C.F.R. or CFR		F 1V110		
	Code of Federal Regulations	,	10μm in diameter	
CO	Carbon Monoxide	pph	Pounds per Hour	
C.S.R. or CSR	Codes of State Rules	ppm	Parts per Million	
DAQ	Division of Air Quality	PSD	Prevention of Significant	
DEP	Department of Environmental		Deterioration	
	Protection	psi	Pounds per Square Inch	
FOIA	Freedom of Information Act	SIC	Standard Industrial	
HAP	Hazardous Air Pollutant		Classification	
HON	Hazardous Organic NESHAP	SIP	State Implementation Plan	
HP	Horsepower	SO_2	Sulfur Dioxide	
lbs/hr or lb/hr	Pounds per Hour	TAP	Toxic Air Pollutant	
LDAR	Leak Detection and Repair	TPY	Tons per Year	
m	Thousand	TRS	Total Reduced Sulfur	
MACT	Maximum Achievable Control	TSP	Total Suspended Particulate	
	Technology	USEPA	United States	
mm	Million		Environmental Protection	
mmBtu/hr	Million British Thermal Units per		Agency	
	Hour	UTM	Universal Transverse	
mmft ³ /hr <i>or</i>	Million Cubic Feet Burned per		Mercator	
mmcf/hr	Hour	VEE	Visual Emissions	
NA or N/A	Not Applicable		Evaluation	
NAAQS	National Ambient Air Quality	VOC	Volatile Organic	
	Standards		Compounds	
NESHAPS	National Emissions Standards for		r	
	Hazardous Air Pollutants			
NO_x	Nitrogen Oxides			

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c. [45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.

[45CSR§30-4.1.a.3.]

- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.

 [45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.

 [45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§\$30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.

[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.

[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments. [45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.

[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
 - a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.

- d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
- e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.
- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR830-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:
 - a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
 - b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
 - a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
 - a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
 - b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.

[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.

[45CSR§30-5.7.b.]

- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

- b. The permitted facility was at the time being properly operated;
- c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
- d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement. [45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

- 2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

 [45CSR§30-5.2.a.]
- 2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 CFR Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

- 2.21.2. Nothing in this permit shall alter or affect the following:
 - a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or
 - b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
 - c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.

[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.

[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege. [45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

- a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
- b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
- c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA. [45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.

 [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 CFR §61.145, 40 CFR §61.148, and 40 CFR §61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 CFR §61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health Environmental Health require a copy of this notice to be sent to them.

[40 CFR §61.145(b) and 45CSR34]

- 3.1.4. Odor. No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
 [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.

 [45CSR\$11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 CFR §§82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR §82.158.
 - c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR §82.161.

[40 CFR 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 CFR §68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 CFR §68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 CFR Part 70 or 71.

[40 CFR 68]

- 3.1.9. **CAIR NO_x Annual Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR39 for each CAIR NO_x Annual source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30. **[45CSR§§39-6.1.b. and 20.1.]**
 - a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§39-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from the compliance account of the CAIR NO_x Annual source covered by the permit. [45CSR§39-23.2.]
 - b. Except as provided in 45CSR§39-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§39-24.1.]

- 3.1.10. **CAIR NO_x Ozone Season Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR40 for each CAIR NO_x Ozone Season source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30. **[45CSR§§40-6.1.b. and 20.1.]**
 - a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§40-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from the compliance account of the CAIR NO_x Ozone Season source covered by the permit.

[45CSR§40-23.2.]

b. Except as provided in 45CSR§40-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§40-24.1.]

3.1.11. **CAIR SO₂Trading Program.** The permittee shall comply with the standard requirements set forth in the attached CAIR Permit Application (see Appendix A) and the CAIR permit requirements set forth in 45CSR41 for each CAIR SO₂ source. The complete CAIR Permit Application shall be the CAIR Permit portion of the Title V permit administered in accordance with 45CSR30.

[45CSR§§41-6.1.b. and 20.1.]

a. The CAIR Permit portion of this permit is deemed to incorporate automatically the definitions of terms under 45CSR§41-2 and, upon recordation by the Administrator under sections 51 through 57, or 60 through 62 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from the compliance account of the CAIR SO₂ source covered by the permit.

[45CSR§41-23.2.]

b. Except as provided in 45CSR§41-23.2, the Secretary will revise the CAIR Permit portion of this permit, as necessary, in accordance with the operating permit revision requirements set forth in 45CSR30.

[45CSR§41-24.1.]

- 3.1.12. **Fugitive Particulate Matter Control.** No person shall cause, suffer, allow, or permit any source of fugitive particulate matter to operate that is not equipped with a fugitive particulate matter control system. This system shall be operated and maintained in such a manner as to minimize the emission of fugitive particulate matter. Sources of fugitive particulate matter associated with fuel burning units shall include, but not be limited to, the following:
 - a. Stockpiling of ash or fuel either in the open or in enclosures such as silos;
 - b. Transport of ash in vehicles or on conveying systems, to include spillage, tracking, or blowing of particulate matter from or by such vehicles or equipment; and
 - c. Ash or fuel handling systems and ash disposal areas.

[45CSR§2-5.1.; 45CSR13 – R13-3082, §4.1.4.] (Not applicable to Gypsum Facility in Section 6.0)

3.2. Monitoring Requirements

3.2.1. None.

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:
 - a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 CFR Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
 - b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
 - c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an

approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 - 1. The permit or rule evaluated, with the citation number and language.
 - 2. The result of the test for each permit or rule condition.
 - 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15), 45CSR2, 45CSR10, and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.; 45CSR13, R13-2319 §4.4.1., and R13-3082, §4.4.1.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.; 45CSR13 – Permit R13-3082, §3.4.1]

- 3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken. [45CSR§30-5.1.c. State-Enforceable only.]
- 3.4.4. The permittee shall maintain records indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. The permittee shall also inspect all fugitive dust control systems weekly from May 1 through September 30 and monthly from October 1 through April 30 to ensure that they are operated and maintained in conformance with their designs. The permittee shall maintain records of all scheduled and non-scheduled maintenance and shall state any maintenance or corrective actions taken as a result of the weekly and/or monthly inspections, the times the fugitive dust control system(s) were inoperable and any corrective actions taken. [45CSR§30-5.1.c.]

3.5. **Reporting Requirements**

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31. [45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

If to the US EPA:

Director Associate Director **WVDEP** Office of Air Enforcement and Compliance Division of Air Quality Assistance (3AP20) 601 57th Street SE U. S. Environmental Protection Agency Charleston, WV 25304

Region III

1650 Arch Street

Philadelphia, PA 19103-2029

Phone: 304/926-0475 FAX: 304/926-0478

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.

[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

- In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:
 - 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.
 - 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
 - 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
 - 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary. [45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None.

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR10	Pleasants Power Station does not have an SO ₂ weight emission standard under State Rule 10.
45CSR§10-8	The auxiliary boilers for both the Pleasants and Willow Island Stations burn natural gas and/or distillate oil and are exempt pursuant to 45CSR§10-10.3.
45CSR5	Pursuant to 45CSR5, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR5. 45CSR2 is applicable to the facility.
45CSR17	Pursuant to 45CSR17, if 45CSR2 is applicable to the facility, then the facility is exempt from 45CSR17. 45CSR2 is applicable to the facility.
40 CFR Part 60 Subpart Da	Pleasants Unit 1 and Unit 2 Boilers commenced construction prior to September 18, 1978.
40 CFR Part 60 Subpart Db	Pleasants Auxiliary Boilers were constructed prior to June 19, 1984.
40 CFR Part 63 Subpart Q	Pleasants Cooling Towers were constructed and in operation prior to September 8, 1994.
40 CFR Part 60 Subpart D	Willow Island Main Boilers were constructed prior to August 17, 1971.
40 CFR Part 60 Subpart Dc	Willow Island Auxiliary Boilers commenced construction prior to June 9, 1989.

40 CFR Part 60 Subpart K	Pleasants and Willow Island stations do not have any tanks storing petroleum liquids (as defined in 40 CFR §60.111) that were constructed after March 8, 1974 and prior to May 19, 1978 and exceed 40,000 gallons in capacity.
40 CFR Part 60 Subpart Ka	Pleasants and Willow Island stations do not have any tanks storing petroleum liquids (as defined in 40 CFR §60.111a) that were constructed after May 18, 1978 and exceed 40,000 gallons in capacity.
40 CFR Part 60 Subpart Kb	Pleasants and Willow Island stations do not have any tanks that were constructed after July 23, 1984 that (a) exceed 75m³ (19,813 gal) in capacity and store volatile organic liquids (as defined in 40 CFR §60.111b) with a maximum true vapor pressure greater than 15.0 kPa (2.18 psia) or (b) exceed 151m³ (39,864 gal) in capacity and store a volatile organic liquids with a maximum true vapor pressure greater than 3.5 kPa (0.51 psia)
40 C.F.R Part 60, Subpart OOO	Limestone equipment was in operation prior to August 31, 1983.

4.0 Pleasants Combustion Sources [emission point ID(s): StackP1, StackP2, Aux Blr Stk P1, P55, P56, PLS FP-1, PLS FP-2]

4.1. Limitations and Standards

4.1.1. Visible Emissions from each stack (StackP1, StackP2 & Aux Blr Stk P1) shall not exceed ten (10) percent opacity based on a six minute block average. *Compliance with this streamlined opacity limit shall ensure compliance with 40 CFR*§60.42(a)(2).

[45CSR§2-3.1.]

4.1.2. Particulate matter emissions from each stack liner (StackP1 & StackP2) shall not exceed 312.25 lb/hr. Compliance with this streamlined particulate matter limit shall ensure compliance with 40 CFR§60.42(a)(1).

[45CSR§2-4.1.a.]

- 4.1.3. Particulate matter emissions from the auxiliary boiler stack (Aux Blr Stk P1) shall not exceed 39.96 lb/hr. [45CSR§2-4.1.b.]
- 4.1.4. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary. (Unit P1 & Unit P2)

[45CSR§2-4.4.]

4.1.5. The visible emission standards set forth in Section 4.1.1. of this permit shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

[45CSR§2-9.1.]

4.1.6. At all times, including periods of start-ups, shutdowns and malfunctions, owners and operators shall, to the extent practicable, maintain and operate any fuel burning unit(s) including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Director which may include, but is not limited to, monitoring results, visible emission observations, review of operating and maintenance procedures and inspection of the source. (Unit P1, Unit P2, Aux Blr PA & Aux Blr PB)

[45CSR§2-9.2., 45CSR16, 40 CFR §60.11(d)]

4.1.7. Emergency Operating Scenarios. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission standard set forth in permit condition 4.1.1. of this permit, or any emergency situation or condition creating a threat to public safety or welfare, the Secretary may grant an exemption to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during that period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the weight emission standards under permit conditions 4.1.2. and/or 4.1.3. of this permit, will not be exceeded during the exemption period.

[45CSR§2-10.1.]

4.1.8. In the event a fuel burning unit employing a flue gas desulphurization system must by-pass such system because of necessary planned or unplanned maintenance, visible emissions may not exceed twenty percent (20%) opacity during such period of maintenance. The Director may require advance notice of necessary

planned maintenance, including a description of the necessity of the maintenance activity and its expected duration and may limit the duration of the variance or the amount of the excess opacity exception herein allowed. The Director shall be notified of unplanned maintenance and may limit the duration of the variance or the amount of excess opacity exception allowed during unplanned maintenance.

[45CSR§2-10.2.]

- 4.1.9. Nitrogen oxides emissions:
 - <u>a.</u> Nitrogen oxides emissions, expressed as NO₂, from each stack liner (StackP1 & StackP2) shall not exceed 0.70 lb/mmBtu, based on a three (3) hour rolling average.

[45CSR16, 40 CFR §60.44(a)(3) & §60.45(g)(3)]

- b. NO_x emissions from the Unit 1 and Unit 2 boilers shall not exceed the following, based on a rolling 30 day average. For the purposes of this condition, a rolling 30 day average shall mean the average daily (calendar day) emission rate from the last 30 operating days excluding NOx emissions during periods that urea injection to the selective catalytic reduction system must be discontinued due to low flue gas temperature to avoid damaging the catalyst. Low flue gas temperature conditions shall mean when the temperature of the flue gas is less than 605°F during any operating hour and this time shall be excluded from the operating day for the purposes of averaging. An operating day shall mean a calendar day in which either boiler is operated for at least one hour.
 - 1. The NOx emission rate shall net exceed 0.25 lb/mmbtu on a 30 day rolling average; and
 - 2. Beginning the 30 day period that commences on May 1 and ends on May 30 and for each succeeding 30 day period through September 30, the NOx emission rate shall not exceed 0.20 lb/mmbtu.
 - 3. The permittee shall monitor the catalyst flue gas temperature and record it as rolling block hourly averages. The recorded information shall include the date, hour, catalyst flue gas temperature, urea flow and an indicator that shows if the urea flow has been discontinued due to low flue gas temperature.
 - 4. The permittee shall maintain on-site records required in 4.1.9.b.3. for a period of five (5) years. Such records may be in electronic form but must be available for inspection by designated agents of the DAQ and exportable to standard database/spreadsheet formats.

[45CSR13 – Permit R13-3082, §4.1.12.]

4.1.10. Sulfur dioxide emissions from each stack liner (StackP1 & StackP2) shall not exceed 1.2 lb/mmBtu, based on a three (3) hour rolling average.

[45CSR16, 40 CFR §60.43(a)(2) §60.45(g)(2)]

- 4.1.11. Sulfur dioxide emissions from the auxiliary boiler stack (Aux Blr Stk P1) shall not exceed 1376.4 lb/hr. [45CSR§10-3.1.e.]
- 4.1.12. Unit P1 and Unit P2 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R §72.6, and as such are required to meet the requirements of 40 CFR Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include:

- a. Hold an Acid Rain permit;
- b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
- c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
- d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
- e. Comply with the monitoring requirements of 40 CFR Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
- f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

[45CSR33, 40 CFR Parts 72, 73, 74, 75, 76, 77, 78.]

4.1.13. The Fuel Oil to be fired in the two Auxiliary Boilers (Aux Blr PA & Aux Blr PB) shall not exceed a maximum sulfur content of 0.5% and an average sulfur content of 0.3%.

[45CSR13 - Permit No. R13-0335 Specific Conditions]

4.1.14. The coal to be fired in the two main boilers (UnitP1 & UnitP2) shall not exceed a maximum ash content of 20 percent.

[45CSR13 - Permit No. R13-0071 Application "Affected Source Sheet" pages 4 and 6 Item 2.A.(4) as modified with Allegheny Power letter to WVAPCC dated September 21, 1977 RE: SO2 removal system]

4.1.15. In accordance with the information filed in Permit Application R13-3082, the emission units P26 and P27 of this permit shall be installed, maintained, and operated so as to minimize any fugitive escape of pollutants, shall not exceed the listed maximum design capacities, shall use the specified control devices, and comply with any other information provided under Table 1.1.

[45CSR13 – Permit R13-3082, §4.1.1.]

- 4.1.16. Use of salt and soda ash shall be in accordance with the following requirements:
 - a. Maximum annual throughput of salt and soda ash shall be limited to 260 tons/year and 15,600 tons/year, respectively; and
 - b. Salt and soda ash shall be delivered dry and both mixed with water during unloading into the appropriate storage tank.

[45CSR13 – Permit R13-3082, §4.1.2.]

- 4.1.17. To minimize any fugitive entrapment of particulate matter from haulroads when delivering salt and soda ash, the permittee shall:
 - a. Where applicable, properly maintain the pavement on all paved roads and mobile work areas (including a reasonable shoulder area) within the site boundary where salt and soda ash delivery trucks will travel; and

b. Maintain access to a water truck in good operating condition, and shall utilize same to apply water and, if needed, a mixture of water and an environmentally acceptable dust control additive, hereinafter referred to as solution, as often as is necessary in order to minimize the atmospheric entrainment of fugitive particulate emissions that may be generated from access roads and other work areas within the site boundary where mobile equipment is used. The spraybar shall be equipped with commercially available spray nozzles, of sufficient size and number, so as to provide adequate coverage to the area being treated.

The pump delivering the solution, shall be of sufficient size and capacity so as to be capable of delivering to the spray nozzle(s) an adequate quantity of solution, and at a sufficient pressure, so as to assure that the treatment process will minimize the atmospheric entrainment of fugitive particulate emissions generated from the haulroads and work areas where mobile equipment is used.

[45CSR13 – Permit R13-3082, §4.1.3.]

4.1.18. The permittee shall operate the SO₃ Control System consistent with the technological capabilities and limitations of the system and with good operation and maintenance practices whenever the Units are operating, except during periods of startup, shut-down, malfunction and maintenance, including periods of maintenance of the SCR, as the SO₃ control system cannot be operated with the SCR out of service due to the physical location of the injection lances.

[45CSR13 – Permit R13-3082, §4.1.5.]

4.1.19. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 of permit R13-3082 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in permit R13-3082 or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR13 – Permit R13-3082, §4.1.14 5.]

4.1.20. Electric Utility Steam Generating Units (EGU) MACT, 40 CFR 63, Subpart UUUUU:

- a. The coal-fired Electric Utility Steam Generating Units *Unit P1* and *Unit P2* shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart UUUUU "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units."
- b. If required to conduct an initial compliance demonstration by performance testing as specified in §63.10011(a), you must submit a Notification of Compliance Status (NOCS) report according to §63.9(h)(2)(ii). The NOCS report must contain all of the information specified in §63.10030(e)(1)-(7), as applicable. If required to submit a Notification of Compliance Status pursuant to 40 CFR 63, Subpart UUUUU, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.10030(e). If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

Beginning no later than April 16, 2016, the Unit 1 and Unit 2 boilers must meet each emission limit and work practice standard in Table 1 through 3 of 40 CFR 63 Subpart UUUUU that applies to each EGU, except as provided under §63.10009.

[40 CFR §63-109991(a)(1)]

[45CSR34; 40 CFR 63, Subpart UUUUU, 45CSR§30-6.5.b. 45CSR13 – Permit R13-3082, §4.1.13.]

4.1.21. <u>Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD</u>

- a. The natural gas/oil fired auxiliary boilers (*Aux Blr PA and Aux Blr PB*), shall comply with all applicable requirements for existing affected sources pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source compliance date of January 31, 2016. [45CSR34; 40 CFR §63.7495(b).]
- b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR34; 40 CFR §63.7545(e); 45CSR§30-6.5.b.]

4.1.22. The following requirements are taken verbatim (including paragraph numbering) from 40 CFR 63 Subpart ZZZZ, §63.6640(f) and are applicable to the Pleasants Emergency Generators A & B engines "Gener. PA" and "Gener. PB" and the Pleasants Fire-Pump 1 engine "PLS FP-1":

If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and

transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34; 40 CFR §63.6640(f)]

- 4.1.23. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the Pleasants Fire Pump 1 engine "PLS FP-1":
 - a. You must comply with the following requirements at all times¹:
 - 1. Change oil and filter every 500 hours of operation or annually, whichever comes first.²
 - 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
 - 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³
 - 4. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

¹ If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report

any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[45CSR34; 40 CFR §§63.6605(a), 63.6625(h) & (i), and 63.6602; 40 CFR 63 Subpart ZZZZ Table 2c Item 1]

b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34; 40 CFR §63.6605(b)]

c. You must operate and maintain the fire pump engine "PLS FP-1" according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34; 40 CFR §§63.6625(e)(2), 63.6640(a); 40 CFR 63 Subpart ZZZZ Table 6 Item 9]

d. You must install a non-resettable hour meter on fire pump engine "PLS FP-1"if one is not already installed.

[45CSR34; 40 CFR §63.6625(f)]

4.1.24. The following requirement from 40 CFR 63 Subpart ZZZZ, is applicable to the Pleasants Fire Pump 2 engine "PLS FP-2":

The internal combustion engine powering the fire pump "PLS FP-2" must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting the requirements of 40 CFR part 60 Subpart IIII, for compression ignition engines. No further requirements apply for this engine under 40 CFR 63 Subpart ZZZZ.

[45CSR34; 40 CFR §63.6590(c)(6)]

40 CFR 60 Subpart IIII Requirements applicable to the fire pump engine "PLS FP-2" (conditions 4.1.25. through 4.1.29.)

4.1.25. The Pleasants Fire Pump 2 engine (PLS FP-2) must comply with the following emission standards in Table 4 of 40 CFR 60 Subpart IIII as follows:

² Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement in Table 2c of 40 CFR 63 Subpart ZZZZ.

³ Sources can petition the Administrator pursuant to the requirements of 40 CFR §63.6(g) for alternative work practices.

Pollutants	g/KW-hr (g/HP-hr)
$NMHC + NO_x$	4.0 (3.0)
PM	0.20 (0.15)

[45CSR16; 40 CFR §60.4205(c); 40 CFR 60 Subpart IIII, Table 4]

4.1.26. The Pleasants Fire Pump 2 engine (PLS FP-2) must meet the emission standards of 40 CFR §60.4205 over the entire life of the engine.

[45CSR16; 40 CFR §60.4206]

4.1.27. The diesel fuel used in the Pleasants Fire Pump 2 engine (PLS FP-2) must meet the requirements of 40 CFR §80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.

[45CSR16; 40 CFR §60.4207(b)]

- 4.1.28. The compliance requirements below, for the Pleasants Fire Pump 2 engine (PLS FP-2) must be followed:
 - a. The engine must be operated and maintained according to the manufacturer's emission-related written instructions;
 - b. Change only those emission-related settings that are permitted by the manufacturer; and
 - c. Meet the requirements of 40 CFR Parts 89 and/or 1068 as they apply to the engine.

[45CSR16; 40 CFR §60.4211(a)]

- 4.1.29. The following requirements are taken verbatim (including paragraph numbering) from 40 CFR 60 Subpart IIII, §60.4211(f) and are applicable to the Pleasants Fire Pump 2 engine (PLS FP-2):
 - (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in nonemergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
 - (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the

manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

- (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP–002–3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP–002–3.
- (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for nonemergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for nonemergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[45CSR16; 40 CFR §60.4211(f)]

4.1.30. Allegheny shall operate the SCRs on Units 1 and 2 (*Unit P1 and Unit P2*) beginning January 1, 2009, whenever the units are in operation, except for periods of required SCR maintenance. (Refer to Appendix D for Clarification of SCR Operation letter)

[Consent Order Number CO-SIP-C-2008-6]

4.2. Monitoring Requirements

4.2.1. Compliance with the visible emission requirements for StackP1 and StackP2, which are separate liners within a common stack, and Aux Blr Stk P1 shall be determined as outlined in sections I.A. and I.B., respectively of the "45CSR2 Monitoring Plan" submitted/revised on December 4, 2001/August 26, 2013 and which is attached in Appendix B of this permit.

[45CSR§§2-3.2. & 8.2.]

4.2.2. The Electrostatic Precipitator (ESP) secondary voltage and secondary current shall be measured continuously using a voltmeter and ammeter integrated into the ESP Unit, and both shall be recorded no less than four times per hour, equally spaced over each hour. The total power (P) input to the ESP is the sum of the products of secondary voltage (V) and current (I) in each field and shall be calculated and recorded in accordance with Section 4.4.4. of this permit.

[45CSR§30-5.1.c., 40 CFR §64.3(b)(1), and 40 CFR §64.3(b)(4)(ii)]

4.2.3. The permittee shall calibrate, maintain, and operate the instrumentation used to measure the secondary voltage and secondary current in Section 4.2.2. of this permit in accordance with manufacturer's specifications.

[45CSR§30-5.1.c. and 40 CFR §64.3(b)(3)]

4.2.4. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure all SO2, NOx, and CO2 emissions from each stack liner, StackP1 and StackP2, as specified in 40 CFR Part 60, Subpart D and in 40 CFR Part 75.

[45CSR16, 45CSR33, 40 CFR §75.10, 40 CFR §60.45, 45CSR13 – Permit R13-3082, §4.2.6.]

4.2.5. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in Section 4.1.11. of this permit, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period, emissions shall not be allowed to exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day.

[45CSR§10-3.8. (Aux Blr Stk P1)]

4.2.6. For the purposes of demonstrating compliance with the maximum material throughput limits set forth in 4.1.16(a), the permittee shall monitor the monthly and rolling twelve month throughputs of salt and soda ash.

[45CSR13 – Permit R13-3082, §4.2.1.]

4.2.7. The permittee shall perform daily monitoring and recordkeeping of the total daily sorbent usage rate, and records of startups, shut-downs, malfunctions, and maintenance of the SO₃ Control System. Daily records maintained in accordance with this paragraph shall be available upon request at the facility.

[45CSR13 – Permit R13-3082, §4.2.2.]

4.2.8. **Emission Limit Averaging Time.** Unless otherwise specified, compliance with all annual limits shall be based on a rolling twelve month total. A rolling twelve month total shall be the sum of the measured parameter of the previous twelve calendar months. Compliance with all hourly emission limits shall be based on the applicable NAAQS averaging times or, where applicable, as given in any approved performance test method. (*P26 and P27*)

[45CSR13 – Permit R13-3082, §3.2.1.]

4.3. Testing Requirements

4.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit P1 and Unit P2 with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table based on the results of the most recent test performed.

Current Test Frequency	Test Results	Retesting Frequency
Annual	after three successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates <80 % of weight emission standard	Once/2 years
Annual	any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates ≤50% of weight emission standard	Once/3 years
Once/2 years	any tests indicates a mass emission rate <80 % of weight emission standard	Once/2 years
Once/2 years	any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/3 years	any tests indicates a mass emission rate ≤50% of weight emission standard	Once/3 years
Once/3 years	any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years
Once/3 years	any test indicates a mass emission rate ≥80% of weight emission standard	Annual

[45CSR§2-8.1., 45CSR§2A-5.2.]

4.3.2. At such reasonable time(s) as the Secretary may designate, in accordance with the provisions of 3.3 of this permit, the permittee shall conduct or have conducted test(s) to determine compliance with the emission limitations established in this permit and/or applicable regulations.

[45CSR13 – Permit R13-3082, §4.3.1.]

4.4. Recordkeeping Requirements

4.4.1. The owner or operator of a fuel burning unit(s) shall maintain on-site all records of monitored data established in the monitoring plan pursuant to Section 4.2.1. of this permit. Such records shall be made available to the Director or his duly authorized representative upon request. Such records shall be retained on-site for a minimum of five years.

[45CSR§2-8.3.a.]

- 4.4.2. The owner or operator shall maintain records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit in a manner to be established by the Director. Such records are to be maintained on-site and made available to the Director or his duly authorized representative upon request.

 [45CSR§2-8.3.c.]
- 4.4.3. Compliance with the auxiliary boiler stack (Aux Blr Stk1) particulate matter mass emission requirements of permit condition 4.1.3. and the operating and fuel usage requirements of permit conditions 4.4.2., and 4.1.13. shall be demonstrated as outlined in section II.A. of the "45CSR2 Monitoring Plan" submitted/revised on December 4, 2001/August 26, 2013 and which is attached in Appendix B of this permit.

[45CSR§§2-8.3.c., 8.4.a. & 8.4.a.1.]

4.4.4. The total secondary Electrostatic Precipitator power input (in kW) shall be calculated and recorded no less than four times per hour, equally spaced over each hour, in an electronic data acquisition system and averaged on a 3 hour basis.

[45CSR§30-5.1.c. and 40 CFR §64.9(b)]

4.4.5. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 1.0 of permit R13-3082, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 - Permit R13-3082, §4.4.2.]

- 4.4.6. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0 of Permit R13-3082, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
 - a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.

g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 – Permit R13-3082, §4.4.3.]

- 4.4.7. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the Pleasants fire pump engine "PLS FP-1":
 - a. Records must be kept as described below:
 - 1. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

[45CSR34; 40 CFR §63.6655(a)(1)]

2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[45CSR34; 40 CFR §63.6655(a)(2)]

3. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34; 40 CFR §63.6655(a)(5)]

4. You must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each operating limitation that applies to you.

[45CSR34; 40 CFR §63.6655(d)]

5. You must keep records of the maintenance conducted on the fire pump engine "PLS FP-1" in order to demonstrate that you operated and maintained the engine according to your own maintenance plan.

[45CSR34; 40 CFR §63.6655(e)]

6. You must keep records of the hours of operation of fire pump engine "PLS FP-1" that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[45CSR34; 40 CFR §63.6655(f)]

7. Records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).

[45CSR34; 40 CFR §63.6660(a)]

8. As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[45CSR34; 40 CFR §63.6660(b)]

9. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

[45CSR34; 40 CFR §63.6660(c)]

4.5. Reporting Requirements

- 4.5.1. Each owner or operator required to install a continuous monitoring system shall submit a written report of excess emissions as defined in 40 CFR Part 60, Subpart D, to the Administrator and the Secretary for every calendar quarter. All quarterly reports shall be postmarked by the 30th day of the month following the end of each calendar quarter and shall include the following information:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR §60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each period of excess emissions.
 - b. Specific identification of each period of excess emissions, that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[45CFR16, 40 CFR §§60.7(c)(1)-(4)]

4.5.2. The designated representative shall electronically report SO2, NOx, and CO2 emissions data and information as specified in 40 CFR §75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.

[45CSR33, 40 CFR §75.64]

4.5.3. The owner or operator shall submit a periodic exception report to the Director, in a manner and at a frequency to be established by the Director. Such exception report shall provide details of all excursions outside the range of measured emissions or monitored parameters established in an approved monitoring plan, and shall include, but not be limited to, the time of the excursion, the magnitude of the excursion, the duration of the excursion, the cause of the excursion and the corrective action taken. Compliance with the periodic exception reporting shall be demonstrated as outlined in section II.C. of the "45CSR2 Monitoring Plan" submitted/revised on December 4, 2001/August 26, 2013 and which is attached in Appendix B of this permit.

[45CSR§2-8.3.b.]

- 4.5.4. Excess opacity periods, resulting from any malfunction, meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Secretary:
 - a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and

b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.]

- 4.5.5. Except as provided in permit condition 4.5.4. above, the owner or operator shall report to the Secretary by telephone, telefax, or e-mail any malfunction of Unit P1 or Unit P2 or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity, by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written report concerning the malfunction with the Secretary within thirty (30) days providing the following information:
 - a. A detailed explanation of the factors involved or causes of the malfunction;
 - b. The date, and time of duration (with starting and ending times) of the period of excess emissions;
 - c. An estimate of the mass of excess emissions discharged during the malfunction period;
 - d. The maximum opacity measured or observed during the malfunction;
 - e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
 - f. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.b.]

- 4.5.6. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the fire pump engine "PLS FP-1":
 - a. You must report each instance in which you did not meet each requirement in Table 2c, to 40 CFR 63 Subpart ZZZZ for existing compression ignition stationary RICE located at a major source of HAP emissions that apply to you. (*The Table 2c requirements for "PLS FP-1" pertain to routine maintenance and repair and startup operations and are listed in condition 4.1.23 of this permit*). These instances are deviations from 40 CFR 63 Subpart ZZZZ and must be reported according to the requirements in 40 CFR §63.6650 (i.e., in the semiannual monitoring report required by condition 3.5.6.).

[45CSR34; 40 CFR §§63.6640(b) and 63.6650(f)]

b. You must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR63 Subpart ZZZZ that apply to you.

[45CSR34; 40 CFR §63.6640(e)]

4.6. Compliance Plan

4.6.1. None

5.0 Pleasants Material Handling Sources

5.1. Limitations and Standards

5.1.1. Visible Emissions from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal shall not exceed twenty (20) percent opacity except during periods of startup, shutdown, or malfunction.

[45CSR16, 40 CFR §60.11(c), 40 CFR §60.254(a) {Conveyors and their Transfer Points (C-1, BF-1A, BF-1B, BPC-1, BPC-2, C-2, C-4A, C-4B, C-5A, C-5B); Feeders (VF-2A, VF-2B); Breakers (CB-A, CB-B); Crushers (Pcru01, Pcru02)}]

5.1.2. At all times, including periods of startup, shutdown, and malfunction, any affected facility including associated air pollution control equipment shall, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. Determination that acceptable operating and maintenance procedures are being used, will be based on information available to the Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

[40 CFR §60.11(d) {Conveyors and their Transfer Points (C-1, BF-1A, BF-1B, BPC-1, BPC-2, C-2, C-4A, C-4B, C-5A, C-5B); Feeders (VF-2A, VF-2B); Breakers (CB-A, CB-B0; Crushers (Pcru01, Pcru02)}]

5.1.3. The particulate emission rate from the bin vents controlling the sludge stabilization lime silos, SSLS-A and SSLS-B shall not exceed the following limitations:

Emission Point ID DC-SSLSA (BH1e in R13-1559) 0.21 lb/hr Emission Point ID DC-SSLSB (BH2e in R13-1559) 0.21 lb/hr

[45CSR13 - Permit No. R13-1559 Specific Requirement (A)(1)]

5.1.4. All conveyors and transfer points serving sludge stabilization silos, SSLS-A and SSLS-B, shall be fully enclosed such that fugitive particulate emissions are minimized.

[45CSR13 - Permit No. R13-1559 Specific Requirement (A)(2)]

5.1.5. The total amount of S-Sorb delivered to the two S-Sorb Silos (RC Units 8200 and 8300) combined shall not exceed 12,550 tons per year. Compliance with this condition shall be based on a rolling twelve month total.

[45CSR13 – Permit R13-3082, §4.1.6.]

5.1.6. S-Sorb Silos (RC Units 8200 and 8300) shall be equipped with fabric filters. Said filters shall be designed, installed, operated and maintained so as to reduce particulate matter emissions by at least 99.99%.

[45CSR13 – Permit R13-3082, §4.1.7.]

- 5.1.7. S-Sorb Day Bin (RC Unit 3200) shall be equipped with a fabric filter. Said filter shall be designed, installed, operated and maintained so as to reduce particulate matter emissions by at least 99.92%.

 [45CSR13 Permit R13-3082, §4.1.8.]
- 5.1.8. The total amount of Mitagent delivered to the Mitagent Silo (RC Unit 3300) shall not exceed 3,150 tons per year. Compliance with this condition shall be based on a rolling twelve month total.

[45CSR13 – Permit R13-3082, §4.1.9.]

5.1.9. Mitagent Silo (RC Unit 3300) shall be equipped with a fabric filter. Said filter shall be designed, installed, operated and maintained so as to reduce particulate matter emissions by at least 99.99%.

[45CSR13 – Permit R13-3082, §4.1.10.]

5.1.10. The total amount of MerSorb delivered to the MerSorb storage tank (RC Unit 3630) shall not exceed 83,200 gallons per year. Compliance with this condition shall be based on a rolling twelve month total. [45CSR13 – Permit R13-3082, §4.1.11.]

5.2. Monitoring Requirements

- 5.2.1. The permittee shall conduct visible emission evaluations as follows for Conveyors and their Transfer Points (C-1, BF-1A, BF-1B, BPC-1, BPC-2, C-2, C-4A, C-4B, C-5A, C-5B); Feeders (VF-2A, VF-2B); Breakers (CB-A, CB-B); Crushers (Pcru01, Pcru02):
 - a. A visible emissions evaluation shall be conducted for each affected facility at least once every consecutive 12-month period in accordance with 40 CFR Part 60 Appendix A, Method 9, or as provided in 40 CFR §60.11. This annual evaluation shall consist of a minimum of 24 consecutive observations for each affected facility.

[45CSR16, 40 CFR §§60.11(b) & (e)(1), and 40 CFR §§60.255(a) & 60.257(a)]

b. Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 CFR Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this permit condition (5.2.1.b.) if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

[45CSR§30-5.1.c.]

c. If the visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 CFR Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of permit condition 5.2.1.b. above, in lieu of those established in this condition.

[45CSR§30-5.1.c.]

5.2.2. In order to determine compliance with condition 5.1.5, the permittee shall monitor and record the amount of S-Sorb delivered to the facility on a daily basis.

[45CSR13 – Permit R13-3082, §4.2.3.]

5.2.3. In order to determine compliance with condition 5.1.8, the permittee shall monitor and record the amount of Mitagent delivered to the facility on a daily basis.

[45CSR13 – Permit R13-3082, §4.2.4.]

5.2.4. In order to determine compliance with condition 5.1.10, the permittee shall monitor and record the amount of MerSorb delivered to the facility on a daily basis.

[45CSR13 – Permit R13-3082, §4.2.5.]

5.3. Testing Requirements

5.3.1. None.

5.4. Recordkeeping Requirements

5.4.1. A record of each visible emissions observation shall be maintained on site, including any data required by 40 CFR Part 60 Appendix A, Method 9. The record shall include, at a minimum, the date, time, name of the emission unit, the applicable visible emissions requirement, the results of the observation, and the name of the observer. Records shall state any maintenance or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken.

[45CSR§30-5.1.c.]

5.4.2. For the Lime Storage Silo Bin Vents, the permittee shall keep records of the visible emissions observations required in Section 5.2.1. of this permit. Proof of compliance with no visible emissions as performed per condition 5.2.1. will be considered proof of compliance for the Regulation 13 permit (R13-1559) limit of 0.21 lb/hr.

[45CSR§30-5.1.c.]

5.5. Reporting Requirements

5.5.1. None.

5.6. Compliance Plan

5.6.1. None.

6.0 Pleasants Gypsum Production Facility

6.1. Limitations and Standards

6.1.1. **Production Limits.** The facility shall produce a maximum of 150 tons per hour and 1,314,000 tons per year of synthetic gypsum. Compliance with all throughput limits shall be determined using a Twelve Month Rolling Total.

[45CSR13 - Permit No. R13-2319, §4.1.1.]

6.1.2. **Barge Loadout Limits.** The facility shall ship a maximum of 1,500 tons per hour and 1,314,000 tons per year of synthetic gypsum through the barge loadout. Compliance with all throughput limits shall be determined using a Twelve Month Rolling Total.

[45CSR13 - Permit No. R13-2319, §4.1.2.]

6.1.3. **Twelve Month Rolling Total.** Compliance with all annual throughput limits set forth in Conditions 6.1.1. and 6.1.2. of this permit shall be determined using a twelve month rolling total. A twelve (12) month rolling total shall mean the sum of the synthetic gypsum produced (or loaded to barge) at any given time for the previous twelve (12) consecutive calendar months.

[45CSR13 - Permit No. R13-2319, §4.1.3.]

6.1.4. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in 45CSR§§7-3.2, 3.3, 3.4, 3.5, 3.6, and 3.7.

[45CSR§7-3.1. and 45CSR13 - Permit No. R13-2319, §4.1.8.]

6.1.5. The provisions of Section 6.1.4. of this permit shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period.

[45CSR§7-3.2. and 45CSR13 - Permit No. R13-2319, §4.1.8.]

6.1.6. No person shall cause, suffer, allow or permit particulate matter to be vented into the open air from any type source operation or duplicate source operation, or from all air pollution control equipment installed on any type source operation or duplicate source operation in excess of 21.2 lb/hr.

[45CSR§7-4.1. and 45CSR13 - Permit No. R13-2319, §4.1.8.]

6.1.7. No person shall cause, suffer, allow, or permit any manufacturing process generating fugitive particulate matter to operate that is not equipped with a system to minimize the emissions of fugitive particulate matter. To minimize means that a particulate capture or suppression system shall be installed to ensure the lowest fugitive particulate emissions reasonably achievable.

[45CSR§7-5.1. and 45CSR13 - Permit No. R13-2319, §4.1.8.]

6.1.8. The owner or operator of a plant shall maintain particulate matter control of the plant premises, and plant owned, leased or controlled access roads, by paving, application of asphalt, chemical dust suppressants or other suitable dust control measures. Good operating practices shall be implemented and when necessary particulate matter suppressants shall be applied in relation to stockpiling and general material handling to minimize particulate matter generation and atmospheric entrainment.

[45CSR§7-5.2. and 45CSR13 - Permit No. R13-2319, §4.1.8.]

6.1.9. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment associated with emission points PG-10 through PG-14 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.

[45CSR§13-5.11. and 45CSR13 - Permit No. R13-2319, §4.1.4.]

6.2. Monitoring Requirements

6.2.1. The owner/operator shall schedule and perform no less frequently than once per week, visual emission observations of all synthetic gypsum handling equipment and storage dome.

[45CSR§30-5.1.c.]

6.3. Testing Requirements

6.3.1. Each emissions unit with a visible emissions limit contained in this permit section shall be observed visually by a trained Method 22 observer at least each calendar week during periods of normal facility operation for a sufficient time interval to determine if the unit has any visible emissions. If visible emissions from any of the emissions units are observed during these weekly observations, or at any other time, that appear to exceed 50 percent of the allowable visible emission requirement for the emission unit, visible emissions evaluations in accordance with 40 CFR Part 60 Appendix A, Method 9 shall be conducted as soon as practicable, but no later than one (1) month from the time of the observation. A Method 9 evaluation shall not be required under this permit condition (6.3.1.) if the visible emissions condition is corrected in a timely manner; the emissions unit is operating at normal operating conditions; and, the cause and corrective measures taken are recorded.

[45CSR§30-5.1.c.]

6.3.2. If the visible emissions evaluation indicates visible emissions in excess of 50 percent of the allowable visible emissions requirement for a given emission unit, a visible emissions evaluation shall be performed for that unit at least once every consecutive 14-day period in accordance with 40 CFR Part 60 Appendix A, Method 9. If subsequent visible emissions evaluations indicate visible emissions less than or equal to 50 percent of the allowable visible emissions requirement for the emission unit for 3 consecutive evaluation periods, the emission unit may comply with the visible emissions testing requirements of permit condition 6.3.1. above, in lieu of those established in this condition.

[45CSR§30-5.1.c.]

6.4. Recordkeeping Requirements

6.4.1. For the purposes of determining compliance with maximum production and throughput limits set forth in 6.1.1. and 6.1.2., the permittee shall maintain a certified monthly and annual record of the amount of gypsum produced and the amount loaded to barges. All records shall be maintained on-site for a minimum of five (5) years and be made available to the Secretary or his or her duly authorized representative upon request.

[45CSR13 – Permit R13-2319, §4.4.4.]

6.4.2. A record of each visible emissions observation shall be maintained on site, including any data required by 40 CFR Part 60 Appendix A, Method 9. The records shall include but not be limited to the date the observation was scheduled, the date and time the observation was performed, the applicable visible

emissions requirement, operating status of the system, the name of the emission unit, the results of the observation, name of the observer and any corrective action that may have occurred as a result of the observation.

[45CSR§30-5.1.c.]

6.4.3. Records shall be maintained on site, indicating the use of any dust suppressants or any other suitable dust control measures applied at the facility. All fugitive dust control systems shall be inspected weekly to ensure that they are operated and maintained in conformance with their designs. Records of weekly inspections shall state any maintenance (scheduled and non-scheduled) or corrective actions taken as a result of the weekly inspections, and the times the fugitive dust control system(s) are inoperable and any corrective actions taken. The records shall also include, but not be limited to, the date of the scheduled inspection, the date the inspection was performed, the result of the inspection, and any corrective action that may have been required. The records shall be made available to the Director or his/her duly authorized representative upon request.

[45CSR§30-5.1.c.]

6.4.4. **Record of Maintenance of Air Pollution Control Equipment.** For all pollution control equipment listed in Section 6.1.9. of this permit, the permittee shall maintain accurate records of all required pollution control equipment inspection and/or preventative maintenance procedures.

[45CSR13 – Permit R13-2319, §4.4.2.]

- 6.4.5. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 6.1.9. of this permit, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
 - a. The equipment involved.
 - b. Steps taken to minimize emissions during the event.
 - c. The duration of the event.
 - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

[45CSR13 - Permit R13-2319, §4.4.3.]

6.5. Reporting Requirements

6.5.1. None.

6.6. Compliance Plan

6.6.1. None.

7.0 Willow Island Combustion Sources [emission point ID(s): StackW1, StackW2, Aux Blr Stk W1, W39, WIL FP-1]

7.1. Limitations and Standards

- 7.1.1. Visible Emissions from each stack (StackW1, StackW2 & Aux Blr Stk W1) shall not exceed ten (10) percent opacity based on a six minute block average.
 [45CSR§2-3.1.
- 7.1.2. Particulate matter emissions from Boiler 1 stack (StackW1) shall not exceed 31.00 lb/hr. [45CSR§2-4.1.a.]
- 7.1.3. Particulate matter emissions from Boiler 2 stack (StackW2) shall not exceed 80.25 lb/hr. [45CSR§2-4.1.a.]
- 7.1.4. Particulate matter emissions from the auxiliary boiler stack (Aux Blr Stk W1) shall not exceed 1.0 lbm/hr. Compliance with this streamlined PM limit assures compliance with 45CSR§2-4.1.b.

 [45CSR13 Permit No. R13-1099 Specific Requirements (A)(1)]
- 7.1.5. The addition of sulfur oxides to a combustion unit exit gas stream for the purpose of improving emissions control equipment is prohibited unless written approval for such addition is provided by the Secretary. (Unit W1 & Unit W2)

 [45CSR\$2-4.4.]
- 7.1.6. The visible emission standards shall apply at all times except in periods of start-ups, shutdowns and malfunctions.

[45CSR§2-9.1.]

- 7.1.7. Any fuel burning unit(s) including associated air pollution control equipment, shall at all times, including periods of start-up, shutdowns, and malfunctions, to the extent practicable, be maintained and operated in a manner consistent with good air pollution control practice for minimizing emissions. (Unit W1, Unit W2, Aux Blr W3A & Aux Blr W3B)

 [45CSR§2-9.2.]
- 7.1.8. Nitrogen oxides emissions, expressed as NO2, from the auxiliary boiler stack (Aux Blr Stk W1) shall not exceed 3.20 lbm/hr.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(1)]

- 7.1.9. Sulfur dioxide emissions from the boiler 1 stack (StackW1) shall not exceed 1671.3 lb/hr. [45CSR§10-3.1.c.]
- 7.1.10. Sulfur dioxide emissions from the boiler 2 stack (StackW2) shall not exceed 4333.5 lb/hr. [45CSR\$10-3.1.c.]
- 7.1.11. Sulfur dioxide emissions from the auxiliary boiler stack (Aux Blr StkW1) shall not exceed 19.8 lbm/hr. Compliance with this streamlined SO2 limit assures compliance with 45CSR§10-3.1.e.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(1)]

7.1.12. Compliance with the allowable sulfur dioxide emission limitations from fuel burning units shall be based on a continuous twenty-four (24) hour averaging time. Emissions shall not be allowed to exceed the weight emissions standards for sulfur dioxide as set forth in 45CSR10, except during one (1) continuous twenty-four (24) hour period in each calendar month. During this one (1) continuous twenty-four hour period emissions shall not exceed such weight emission standards by more than ten percent (10%) without causing a violation of 45CSR10. A continuous twenty-four (24) hour period is defined as one (1) calendar day. (StackW1, StackW2 & Aux Blr Stk W1)

[45CSR§10-3.8.]

- 7.1.13. Willow Island Unit W1 and Unit W2 are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R §72.6, and as such is required to meet the requirements of 40 CFR Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include:
 - a. Hold an Acid Rain permit;
 - b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
 - c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
 - d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
 - e. Comply with the monitoring requirements of 40 CFR Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
 - f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I and 40 CFR Part 75.

[45CSR33, 40 CFR Parts 72, 73, 74, 75, 76, 77, 78.]

7.1.14. Non-Methane Hydrocarbon emissions from the auxiliary boiler stack (Aux Blr Stk W1) shall not exceed 0.1 lbm/hr.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(1)]

- 7.1.15. Carbon Monoxide emissions from the auxiliary boiler stack (Aux Blr Stk W1) shall not exceed 0.32 lbm/hr. [45CSR13 Permit No. R13-1099 Specific Requirements (A)(1)]
- 7.1.16. The fuel burned in the two auxiliary boilers shall consist of #2 fuel oil and/or natural gas only. [45CSR13 Permit No. R13-1099 Specific Requirements (A)(2)]
- 7.1.17. Maximum sulfur content of #2 fuel oil burned in the auxiliary boilers shall not exceed 0.5 percent by weight of sulfur.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(3)]

7.1.18. Operation of the auxiliary boilers shall be only during times when the "main" boilers are down, except for those times requiring testing.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(4)]

7.1.19. Maximum yearly operation of each individual auxiliary boiler shall not exceed one hundred forty (140) days per year.

[45CSR13 - Permit No. R13-1099 Specific Requirements (A)(5)]

7.1.20. Maximum Design Heat Input to each individual auxiliary boiler shall not exceed 20.41 x 106 Btu/hr. [45CSR13 - Permit No. R13-1099 Specific Requirements (A)(6)]

7.1.21. Emergency Operating Scenarios.

a. In the event of an unavoidable shortage of fuel having characteristics or specifications necessary to comply with the visible emission standard set forth in permit condition 7.1.1. of this permit, or any emergency situation or condition creating a threat to public safety or welfare, the Secretary may grant an exemption to the otherwise applicable visible emission standards for a period not to exceed fifteen (15) days, provided that visible emissions during that period do not exceed a maximum six (6) minute average of thirty (30) percent and that a reasonable demonstration is made by the owner or operator that the weight emission standards under permit conditions 7.1.2., 7.1.3., and/or 7.1.4. of this permit, will not be exceeded during the exemption period.

[45CSR§2-10.1.]

b. Due to unavoidable malfunction of equipment or inadvertent fuel shortages, SO2 emissions exceeding those provided for permit conditions 7.1.9., 7.1.10., and/or 7.1.11. of this permit, may be permitted by the Secretary for periods not to exceed ten (10) days upon specific application to the Secretary. Such application shall be made within twenty-four (24) hours of the equipment malfunction or fuel shortage. In cases of major equipment failure or extended shortages of conforming fuels, additional time periods may be granted by the Secretary, provided a corrective program has been submitted by the owner or operator and approved by the Secretary.

[45CSR§10-9.1.]

7.1.22. Alternative Fuel Usage Scenarios.

Willow Island Unit W2 may burn "Tire Derived Fuel" (TDF) as outlined in Consent Order CO-R13-99-39, effective date November 8, 1999. (See Appendix C)

7.1.23. Electric Utility Steam Generating Units (EGU) MACT, 40 CFR 63, Subpart UUUUU:

a. The coal-fired Electric Utility Steam Generating Units *Unit W1* and *Unit W2* shall comply with all applicable requirements for existing affected sources, pursuant to 40 CFR 63, Subpart UUUUU "National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units" no later than the existing source compliance date of April 16, 2015, or as amended by US EPA.

If required to conduct an initial compliance demonstration by performance testing as specified in §63.10011(a), you must submit a Notification of Compliance Status (NOCS) report according to §63.9(h)(2)(ii). The NOCS report must contain all of the information specified in §63.10030(e)(1)-(7), as applicable. If required to submit a Notification of Compliance Status pursuant to 40 CFR 63, Subpart UUUUU, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.10030(e). If requested, this Title V permitting

deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR34; 40 CFR 63, Subpart UUUUU, 45CSR§30-6.5.b.]

7.1.24. <u>Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD:</u>

- a. The natural gas/oil fired auxiliary boilers (*Aux Blr W3A and Aux Blr W3B*), shall comply with all applicable requirements for existing affected sources pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source compliance date of January 31, 2016. [45CSR34; 40 CFR §63.7495(b).]
- b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

[45CSR34; 40 CFR §63.7545(e); 45CSR§30-6.5.b.]

7.1.25. The following requirements are taken verbatim (including paragraph numbering) from 40 CFR 63 Subpart ZZZZ, §63.6640(f) and are applicable to the Willow Island Emergency Generator A engine "Emer Gen WA" and the Willow Island Fire-Pump 1 engine "WIL FP-1":

If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary RICE in emergency situations.
- (2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for

maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

- (ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
- (iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[45CSR34; 40 CFR §63.6640(f)]

- 7.1.26. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the Willow Island Fire Pump 1 engine "WIL FP-1":
 - a. You must comply with the following requirements at all times¹:
 - 1. Change oil and filter every 500 hours of operation or annually, whichever comes first.²
 - 2. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
 - 3. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.³
 - 4. During periods of startup, minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply.

¹ If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Table 2c of 40 CFR 63 Subpart ZZZZ, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.

[45CSR34; 40 CFR §§63.6605(a), 63.6625(h) & (i), and 63.6602; 40 CFR 63 Subpart ZZZZ Table 2c Item 1]

b. At all times you must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[45CSR34; 40 CFR §63.6605(b)]

c. You must operate and maintain the fire pump engine "WIL FP-1" according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions.

[45CSR34; 40 CFR §§63.6625(e)(2), 63.6640(a); 40 CFR 63 Subpart ZZZZ Table 6 Item 9]

d. You must install a non-resettable hour meter on fire pump engine "WIL FP-1"if one is not already installed.

[45CSR34; 40 CFR §63.6625(f)]

7.2. Monitoring Requirements

7.2.1. Compliance with the visible emission requirements of permit condition 7.1.1. shall be determined as outlined in section I.A. of the "45CSR2 Monitoring Plan" submitted on August 6, 2001 and attached in Appendix B of this permit. (*StackW1*, *StackW2*)

[45CSR§§2-3.2. 8.1.a., & 8.2.]

- 7.2.2. Compliance with sections 7.1.9., 7.1.10., 7.1.11., and 7.1.12. of this permit shall be demonstrated by testing and/or monitoring in accordance with one or more of the following: 40 CFR Part 60, Appendix A, Method 6, Method 15, continuous emissions monitoring systems (CEMS) or fuel sampling and analysis as set forth in an approved monitoring plan for each emission unit. (*StackW1*, *StackW2*)
 - [45CSR§10-8.2.c.]
- 7.2.3. The owner or operator shall install, calibrate, certify, operate, and maintain continuous monitoring systems that measure and record Opacity and all SO2, NOx, and CO2 emissions from emission points StackW1 and StackW2 as specified in 40 CFR Part 75. The one minute average opacity data shall be used as an input to calculate one minute PM emission rates. Opacity shall be measured on a continuous basis with the exception of QC/QA periods, monitor malfunctions periods, and periods where the boiler is off-line.

[45CSR§30-5.1.c., 45CSR33, 40 CFR §75.10, and 40 CFR §64.3(b)(1)]

² Sources have the option to utilize an oil analysis program as described in 40 CFR §63.6625(i) in order to extend the specified oil change requirement in Table 2c of 40 CFR 63 Subpart ZZZZ.

³ Sources can petition the Administrator pursuant to the requirements of 40 CFR §63.6(g) for alternative work practices.

7.2.4. The Data Acquisition System shall be programmed to calculate PM emissions (lb/hr) from opacity data. The equation used to calculate TSP emissions will be developed using the opacity vs. TSP concentration correlation curves as determined by particulate testing with the TEOM 7000. The opacity vs. TSP concentration curve will be developed using at least 1,000 paired data points that will attempt to capture a normal full daily cycle of operations. An excursion shall be defined as a 3-hour block average where the calculated PM emission rate exceeds the limit established in 45CSR§2-4.1.a. (31.0 lb/hr for Unit W1; 80.25 lb/hr for Unit W2)

[45CSR§30-5.1.c. and 40 CFR §64.3(b)(1)]

7.2.5. The COM QA/QC procedures shall be consistent with the applicable requirements of 40 CFR Part 75. [40 CFR §75.21 and 40 CFR §64.3(b)(3)]

7.3. Testing Requirements

7.3.1. The owner or operator shall conduct, or have conducted, tests to determine the compliance of Unit W1 and Unit W2 with the particulate matter mass emission limitations. Such tests shall be conducted in accordance with the appropriate method set forth in 45CSR2 Appendix - Compliance Test Procedures for 45CSR2 or other equivalent EPA approved method approved by the Secretary. Such tests shall be conducted in accordance with the schedule set forth in the following table based on the results of the most recent test performed.

Current Test Frequency	Test Results	Retesting Frequency
Annual	after three successive tests indicate mass emission rates <50% of weight emission standard	Once/3 years
Annual	after two successive tests indicate mass emission rates <80 % of weight emission standard	Once/2 years
Annual	any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/2 years	after two successive tests indicate mass emission rates <pre> ≤50% of weight emission standard</pre>	Once/3 years
Once/2 years	any tests indicates a mass emission rate <80 % of weight emission standard	Once/2 years
Once/2 years	any tests indicates a mass emission rate ≥80% of weight emission standard	Annual
Once/3 years	any tests indicates a mass emission rate ≤50% of weight emission standard	Once/3 years
Once/3 years	any test indicates mass emission rates between 50% and 80 % of weight emission standard	Once/2 years
Once/3 years	any test indicates a mass emission rate ≥80% of weight emission standard	Annual

[45CSR§2-8.1., 45CSR§2A-5.2.]

7.4. Recordkeeping Requirements

- 7.4.1. Compliance with the operating and fuel usage requirements and emission limits of permit conditions 7.1.4., 7.4.2., and 7.4.3., shall be demonstrated as outlined in sections III.C.4., III.A. and IV.A. of the "45CSR2 &10 Monitoring Plan" submitted on August 6, 2001 and which is attached in Appendix B of this permit. [45CSR§2-8.3.c. & 8.4.a., 45CSR§10-8.3.c.]
- 7.4.2. Records of monitored data established in the monitoring plan shall be maintained on site and shall be made available to the Secretary or his duly authorized representative upon request. (*StackW1*, *StackW2*) [45CSR§2-8.3.a. and 45CSR§10-8.3.a.]
- 7.4.3. Records of the operating schedule and the quantity and quality of fuel consumed in each fuel burning unit shall be maintained on-site in a manner to be established by the Secretary and made available to the Secretary or his duly authorized representative upon request.

 [45CSR\$2-8.3.c.]
- 7.4.4. Opacity one minute average opacity data shall be collected and stored, and hourly averages based on the one minute data shall be calculated and stored on a certified Data Acquisition System (DAS). TSP The one minute data, calculated from the one minute average opacity data, shall be used to calculate a 1-hour block average which shall be used to calculate a 3-hour rolling average, all of which shall be stored in an electronic data acquisition system.

[45CSR§30-5.1.c. and 40 CFR 64.9(b)]

- 7.4.5. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the Willow Island fire pump engine "WIL FP-1":
 - a. Records must be kept as described below:
 - 1. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in §63.10(b)(2)(xiv).

[45CSR34; 40 CFR §63.6655(a)(1)]

2. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.

[45CSR34; 40 CFR §63.6655(a)(2)]

3. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

[45CSR34; 40 CFR §63.6655(a)(5)]

4. You must keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each operating limitation that applies to you.

[45CSR34; 40 CFR §63.6655(d)]

5. You must keep records of the maintenance conducted on the fire pump engine "WIL FP-1" in order to demonstrate that you operated and maintained the engine according to your own maintenance plan.

[45CSR34; 40 CFR §63.6655(e)]

6. You must keep records of the hours of operation of fire pump engine "WIL FP-1" that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.

[45CSR34; 40 CFR §63.6655(f)]

7. Records must be in a form suitable and readily available for expeditious review according to 40 CFR §63.10(b)(1).

[45CSR34; 40 CFR §63.6660(a)]

8. As specified in 40 CFR §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[45CSR34; 40 CFR §63.6660(b)]

9. You must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR §63.10(b)(1).

[45CSR34; 40 CFR §63.6660(c)]

7.5. Reporting Requirements

7.5.1. A periodic exception report shall be submitted to the Secretary, in a manner and at a frequency to be established by the Secretary. (*StackW1*, *StackW2*)

[45CSR§2-8.3.b. and 45CSR§10-8.3.b.]

7.5.2. Compliance with the periodic exception reporting of permit condition 7.5.1. shall be demonstrated as outlined in sections III.C. and IV.C. of the "45CSR2 &10 Monitoring Plan" submitted on August 6, 2001 and which is attached in Appendix B of this permit.

[45CSR§2-8.3.b. and 45CSR§10-8.3.b.]

- 7.5.3. Excess opacity periods, resulting from any malfunction, meeting the following conditions may be reported on a quarterly basis unless otherwise required by the Secretary:
 - a. The excess opacity period does not exceed thirty (30) minutes within any twenty-four (24) hour period; and
 - b. Excess opacity does not exceed forty percent (40%).

[45CSR§2-9.3.a.]

7.5.4. Except as provided in permit condition 7.5.3. above, the owner or operator shall report to the Secretary by telephone, telefax or e-mail, any malfunction of Unit W1 or Unit W2 or their associated air pollution control equipment, which results in any excess particulate matter or excess opacity by the end of the next business day after becoming aware of such condition. The owner or operator shall file a certified written

report concerning the malfunction with the Secretary within thirty (30) days providing the following information:

- a. A detailed explanation of the factors involved or causes of the malfunction;
- b. The date, and time of duration (with starting and ending times) of the period of excess emissions;
- c. An estimate of the mass of excess emissions discharged during the malfunction period;
- d. The maximum opacity measured or observed during the malfunction;
- e. Immediate remedial actions taken at the time of the malfunction to correct or mitigate the effects of the malfunction; and
- f. A detailed explanation of the corrective measures or program that will be implemented to prevent a recurrence of the malfunction and a schedule for such implementation.

[45CSR§2-9.3.b.]

- 7.5.5. Records of the operating schedule and the quantity and quality of fuel consumed in each unit shall be maintained in a manner specified by the Secretary. Such records are to be maintained on-site and made available to the Secretary or his duly authorized representative upon request. (*StackW1*, *StackW2*) [45CSR\$10-8.3.c.]
- 7.5.6. The designated representative shall electronically report SO2, NOx, and CO2 emissions data and information as specified in 40 CFR §75.64 to the Administrator of USEPA, quarterly. Each electronic report must be submitted within thirty (30) days following the end of each calendar quarter.

 [45CSR33, 40 CFR §75.64]
- 7.5.7. The designated representative shall report excess emissions of opacity recorded under 40 CFR §§75.50(f) or 75.54(f) to the Secretary, in the format specified by the Secretary.

 [45CSR33, 40 CFR §75.65]
- 7.5.8. The following requirements from 40 CFR 63 Subpart ZZZZ, are applicable to the fire pump engine "WIL FP-1":
 - a. You must report each instance in which you did not meet each requirement in Table 2c, to 40 CFR 63 Subpart ZZZZ for existing compression ignition stationary RICE located at a major source of HAP emissions that apply to you. (The Table 2c requirements for "WIL FP-1" pertain to routine maintenance and repair and startup operations and are listed in condition 7.1.26 of this permit). These instances are deviations from 40 CFR 63 Subpart ZZZZ and must be reported according to the requirements in 40 CFR §63.6650 (i.e., in the semiannual monitoring report required by condition 3.5.6.).

[45CSR34; 40 CFR §§63.6640(b) and 63.6650(f)]

b. You must also report each instance in which you did not meet the requirements in Table 8 to 40 CFR 63 Subpart ZZZZ that apply to you.

[45CSR34; 40 CFR §63.6640(e)]

7.6. Compliance Plan

7.6.1. None.

8.0 Willow Island Material Handling Sources

8.1. Limitations and Standards

- 8.1.1. **Emergency Operating Scenarios.** Upon applying to the Secretary for approval, coal may be received by truck in the event of an emergency.
- 8.1.2. The Coal and Ash handling systems are subject to 45CSR§2-5 as outlined in the facility wide section of this permit regarding fugitive dust control system. (See condition 3.1.12)

8.2. Monitoring Requirements

8.2.1. None.

8.3. Testing Requirements

8.3.1. None.

8.4. Recordkeeping Requirements

8.4.1. None.

8.5. Reporting Requirements

8.5.1. None.

8.6. Compliance Plan

8.6.1. None.

APPENDIX A

- 1). Pleasants Power Station CAIR Permit Application
- 2). Willow Island Power Station CAIR Permit Application



CAIR Permit Application

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

OTEN 4	This submission is: ☑ New ☐ Revised					
STEP 1 Identify the source by plant name, and ORIS or facility code	Pleasants Power Station Plant Name	7300005 West Virginia ID Number		6004 ORIS/Facility Code		
STEP 2 Enter the unit ID# for each CAIR unit and indicate to which	Unit 1D#	NO _x Annual	NO _x Ozone Season	SO ₂ Annual		
CAIR programs each unit is subject (by placing an "X" in the column)	Unit 2	X	X	X		

STEP 3 Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

- (a) Permit Requirements.
 (1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:
- (i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and (ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review

a CAIR permit application and issue or deny a CAIR permit.

- (2) The owners and operators of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO_2 source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.
- (3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for such CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and such CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and ĈAIR SO₂ unit (as applicable).

Plant Name

STEP 3. continued

(b) Monitoring, reporting and recordkeeping requirements.

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) with the CAIR NO_x Annual emissions limitation, CAIR NO_x Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

(c) Nitrogen oxides annual emissions requirements.

- (1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.
- (2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter.
- (3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.

(4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.

- (5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR NO_X Annual allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_x Annual allowance to or from a CAIR NO_x Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

- (d) <u>Nitrogen oxides ozone season emissions requirements.</u>
 (1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO. Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.
- (2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.
- (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
- (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

- (e) <u>Sulfur dioxide annual emission requirements.</u>
 (1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.
- (2) A CAIR SO, unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control

period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with sections 51through 62, and 80 through 88 of 45CSR41.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such

(6) A CAIR SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO2 allowance to or from a CAIR SO2 source's compliance account is incorporated automatically in any CAIR permit of the source.

Pleasants Power Station

STEP 3. continued

- (f) Excess emissions requirements.
 (1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:
- (i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR\$39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code \$22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:

(i) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR§40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of

45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:
(i) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

(g) Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the
- (i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_x unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.

 (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR

NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading

Program and CAIR SO₂ Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) or the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO $_{
m x}$ Annual units, CAIR NO $_{
m x}$ Ozone Season units or CAIR SO₂ units (as applicable) at the source

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit or CAIR SO₂ unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO, Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Plant Name	Pleasants Power Station	ŧ	CAIR Permit Application Page 4

STEP 3, continued

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative	David C. Cannon Jr.		
Signature Allan	mf	Date 4/22/2007	



CAIR Permit Application

For sources subject to the Clean Air Interstate Rule Trading Programs under 45CSR39, 45CSR40 and 45CSR41, the West Virginia Department of Environmental Protection, Division of Air Quality has prepared this CAIR Permit Application. Please refer to sections 21 and 22 of 45CSR39, 45CSR40 and 45CSR41, as applicable.

	This submission is: 🗵 New 🔲 Re	vised			
STEP 1 Identify the source by plant name, and	Willow Island Power Station	7300004		3946	
ORIS or facility code	Plant Name	West Virginia ID Number		ORIS/Facility Code	
STEP 2	Unit ID#	NO _x Annual	NO _x Ozone Season	SO ₂ Annual	
Enter the unit ID# for	Linit 1	V	V		

indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO _x Annual	NO _x Oz	one Season	SO ₂ Annual
Unit 1	X		X	X
Unit 2	X		Χ	X
			1917/	
	110000000000000000000000000000000000000			
4.0				
			70.00	

STEP 3 Read the standard requirements and the certification. enter the name of the CAIR designated representative, and sign and date

Standard Requirements

- (a) Permit Requirements.

 (1) The CAIR designated representative of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit
- and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall:

 (i) Submit to the Secretary a complete CAIR permit application under 45CSR§39-22, 45CSR§40-22 and 45CSR§41-22 (as applicable) in accordance with the deadlines specified in 45CSR§39-21, 45CSR§40-21 and 45CSR§41-21 (as applicable); and (ii) Submit in a timely manner any supplemental information that the Secretary determines is necessary in order to review

a CAIR permit application and issue or deny a CAIR permit.

- (2) The owners and operators of each CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO₂ source (as applicable) required to have a Title V operating permit and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO₂ unit (as applicable) required to have a Title V operating permit at the source shall have a CAIR permit issued by the Secretary under sections 20 through 24 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) for the source and operate the source and the unit in compliance with such CAIR permit.
- (3) Except as provided in sections 80 through 88 of 45CSR39, 45CSR40 and 45CSR41, the owners and operators of a CAIR (3) Except as provided in sections 80 through 88 of 49C5R39, 49C5R49, and 49C5R41, the owners and operators of a CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO₂ source (as applicable) that is not otherwise required to have a Title V operating permit and each CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO₂ unit (as applicable) that is not otherwise required to have a Title V operating permit are not required to submit a CAIR permit application and to have a CAIR permit, under sections 20 through 24 of 45C5R39, 45C5R40 and 45C5R41 (as applicable) for such CAIR NO_X Annual source, CAIR NO_X Ozone Season source and CAIR SO₂ source (as applicable) and such CAIR NO_X Annual unit, CAIR NO_X Ozone Season unit and CAIR SO₂ unit (as applicable) unit and ĈAIR SO₂ unit (as applicable).

STEP 3, continued

(b) Monitoring, reporting and recordkeeping requirements.

Plant Name

(1) The owners and operators and the CAIR designated representative, of each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall comply with the monitoring, reporting and recordkeeping requirements of sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(2) The emissions measurements recorded and reported in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) shall be used to determine compliance by each CAIR NO $_{\rm X}$ Annual source, CAIR NO $_{\rm X}$ Ozone Season source and CAIR SO $_{\rm 2}$ source (as applicable) with the CAIR NO $_{\rm X}$ Annual emissions limitation, CAIR NO $_{\rm X}$ Ozone Season emissions limitation and CAIR SO₂ emissions limitation (as applicable) under 45CSR§39-6.3, 45CSR§40-6.3 and 45CSR§41-6.3 (as applicable).

- (c) Nitrogen oxides annual emissions requirements.

 (1) As of the allowance transfer deadline for the 2009 control period and each control period thereafter, the owners and operators of each CAIR NO_x Annual source and each CAIR NO_x Annual unit at the source shall hold, in the source's compliance account, CAIR NO_x Annual allowances available for compliance deductions for the control period under 45CSR§39-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Annual units at the source, as determined in accordance with sections 70 through 75 of 45CSR39.
- (2) A CAIR NO_x Annual unit shall be subject to the requirements under 45CSR§39-6.3.a for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR39, and for each control period thereafter
- (3) A CAIR NO_x Annual allowance shall not be deducted, for compliance with the requirements under 45CSR§39-6.3.a, for the control period in a calendar year before the year for which the CAIR NO_x Annual allowance was allocated.
- (4) CAIR NO_x Annual allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR39.
- (5) A CAIR NO_x Annual allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NOx Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§39-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
- (6) A CAIR NO_X Annual allowance does not constitute a property right.
 (7) Upon recordation by the Administrator under sections 40 through 62, and 80 through 88 of 45CSR39, every allocation, transfer, or deduction of a CAIR NO_X Annual allowance to or from a CAIR NO_X Annual source's compliance account is incorporated automatically in any CAIR permit of the source.

- (d) Nitrogen oxides ozone season emissions requirements.
 (1) As of the allowance transfer deadline for the 2009 ozone season and each ozone season thereafter, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the ozone season under 45CSR§40-54.1 in an amount not less than the tons of total nitrogen oxides emissions for the ozone season from all CAIR NO_X Ozone Season units at the source, as determined in accordance with sections 70 through 75 of 45CSR40.
- (2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under 45CSR§40-6.3.a for the ozone season starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, 70.2.c or 70.2.g of 45CSR40 and for each ozone season thereafter.
- (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under 45CSR§40-6.3.a, for an ozone season in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated,
- (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with sections 50 through 62, and 80 through 88 of 45CSR40.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§40-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under subdivision 43.3, sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR40, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

- (e) <u>Sulfur dioxide annual emission requirements</u>,
 (1) As of the allowance transfer deadline for the 2010 control period and each control period thereafter, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period, as determined in accordance with subsections 54.1 and 54.2 of 45CSR§41 in an amount not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with sections 70 through 75 of 45CSR41.
- (2) A CAIR SO₂ unit shall be subject to the requirements under 45CSR§41-6.3.a for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under subdivisions 70.2.a, 70.2.b, or 70.2.e of 45CSR41 and for each control period thereafter.
- (3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under 45CSR§41-6.3.a, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

 (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System
- accounts in accordance with sections 51through 62, and 80 through 88 of 45CSR41.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under 45CSR§41-5 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
 - (6) A CAIR SO₂ allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under sections 51 through 57, 60 through 62, and 80 through 88 of 45CSR41, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source.

Willow Island Power Station

STEP 3. continued

(f) Excess emissions requirements.

- (1) If a CAIR NO_x Annual source emits nitrogen oxides during any control period in excess of the CAIR NO_x Annual emissions limitation, then:
- (i) The owners and operators of the source and each CAIR NO_x Annual unit at the source shall surrender the CAIR NO_x Annual allowances required for deduction under 45CSR§39-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and

(ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of

- 45CSR39, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

 (2) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any ozone season in excess of the CAIR NO_x Ozone Season emissions limitation, then:
- (i) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under 45CSR\$40-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR40, the Clean Air Act, and West Virginia Code §22-5-1 et seq.
- (3) If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then: (i) The owners and operators of the source and each CAIR SO2 unit at the source shall surrender the CAIR SO2 allowances required for deduction under 45CSR§41-54.4.a and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or West Virginia Code §22-5-1 et seq; and
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 45CSR41, the Clean Air Act, and West Virginia Code §22-5-1 et seq.

- (g) Recordkeeping and Reporting Requirements.
 (1) Unless otherwise provided, the owners and operators of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Secretary or the
- (i) The certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO_x unit (as applicable) at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 45CSR§39-13, 45CSR§40-13 and 45CSR§41-13 (as applicable) changing the CAIR designated representative.
- (ii) All emissions monitoring information, in accordance with sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable), provided that to the extent that sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable) provides for a 3-year period for recordkeeping, the 3-year period shall apply.
- (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).
- (iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_X Annual Trading Program, CAIR NO_X Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading
- Program and CAIR SO₂ Trading Program (as applicable).

 (2) The CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) at the source shall submit the reports required under the CAIR NO $_{
 m x}$ Annual Trading Program, CAIR NO $_{
 m x}$ Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable) including those under sections 70 through 75 of 45CSR39, 45CSR40 and 45CSR41 (as applicable).

(1) Each CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) and each NO_x unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading

Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) or the CAIR designated representative of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source or CAIR SO₂ source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x Annual units, CAIR NO_x

Ozone Season units or CAIR SO₂ units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program or CAIR SO₂ Trading Program (as applicable) that applies to a CAIR NO_x Annual unit, CAIR SO₂ unit or CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NOx Annual unit, CAIR NOx Ozone Season unit or CAIR SO2 unit (as applicable) shall also apply to the owners and operators of such unit.

(i) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR NO_x Ozone Season Trading Program and CAIR SO₂ Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under 45CSR§39-5, 45CSR§40-5, or 45CSR§41-5 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Annual source, CAIR NO_x Ozone Season source and CAIR SO₂ source (as applicable) or CAIR NO_x Annual unit, CAIR NO_x Ozone Season unit and CAIR SO₂ unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

Plant Name Willow Island Power Station	CAIR Permit Application Page 4

STEP 3, continued

Certification

I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative David C. Cannon Jr.	
Signature Challeng	Date GLYLOO1

APPENDIX B

- 1). Pleasants Power Station 45CSR2 & 45CSR10 Monitoring Plan
- 2). Willow Island Power Station 45 CSR2 & 45 CSR10 Monitoring Plan

Revised August 2013

45 CSR 2 Monitoring and Recordkeeping Plan <u>Utility Boilers</u>

Facility Information:

Facility Name: Pleasants Power Station

Facility Address: Pleasants Power Station

State Route 2 (No. 1 Power Station Blvd.)

Willow Island, WV 26134

Facility Contact: Dale E. Evans

Director, Pleasants Plant Telephone (304) 665-3244 FAX # (304) 665-3282

Supervisor Air Permitting: Mark A. Sowa

800 Cabin Hill Drive Greensburg, PA. 15601 Telephone (724) 838-6133

Facility Description: (Plant ID # 07300005)

Pleasants Power Station is a coal-fired electric generating facility with two main combustion units (Units 1 & 2) with in-service dates of 1978 and 1980 respectively, discharging through two scrubbed stacks (1 and 2). The fiberglass stack liners exhaust through a single concrete chimney shell with a height of approximately 640 feet and an outlet diameter of approximately 73 feet. There are two hyperbolic cooling towers that service the two units. Each unit has an electrostatic precipitator (ESP) for particulate matter control. Pleasants Power Station also has two auxiliary boilers (A and B) that discharge to a separate (auxiliary) stack. Each unit has a design heat input greater than 10mmBtu/hr making them subject to 45CSR 2.

I. 45 CSR 2 Monitoring Plan:

In accordance with §. 8.2A of 45 CSR 2, the following proposed plan is for monitoring compliance with opacity limits found in § 3 of that rule:

A. Scrubbed Stacks 1 and 2

1. **Applicable Standard:** 10% opacity based on a six-minute block average 45 CSR 2, § 3.1.

2. Monitoring Method:

Per 45 CSR 75 (Acid Rain) the scrubbed stacks are exempt from the COMS requirement. The alternative method to monitoring opacity will be Electrostatic Precipitator (ESP) power monitoring as described in the WVDEP approved Compliance Assurance Monitoring (CAM) Plan established in accordance with 40 CFR 64.9. CAM testing occurred on August 7th and 12th, 2008. Particulate emission rates and ESP power levels were measured simultaneously to determine the minimum acceptable ESP power levels for particulate matter compliance. Secondary voltage and current for each ESP field are directly measured using instrumentation integrated in the ESP unit. The parameters are measured continuously and recorded four times per hour. Total secondary ESP power input (kW) is calculated and recorded four times per hour and a 3-hour block average is calculated from the data. Other appropriate methods that would produce credible data may be used, but will generally only be used in the absence of CAM Plan monitoring data, or as other credible evidence used in conjunction with CAM Plan monitoring data.

Section 45 CSR 2A§6.3.a.1 requires that the monitoring plan include provisions to take Method 9 readings for compliance determination at a minimum of once per month per stack when the source has operated at normal conditions for at least twenty-four hours. The two units at Pleasants are scrubbed and exhaust to two liners within a single concrete chimney shell, creating a combined plume and making it difficult to determine compliance for a single unit. As an alternate means of compliance, Pleasants Power Station will monitor 3-hour block average ESP power levels to ensure each unit remains above the minimum power level (Unit 1 268 kW, Unit 2 270 kW) established under the CAM Plan.

Section 45 CSR 2A§6.3.A.8.a requires Method 9 readings for excursions exceeding one hour. As an alternative means of compliance, Pleasants Power Station will continuously monitor ESP power levels. Should ESP

power level drop below the required minimum value, station personnel will take action as soon as possible to correct the problem. Any excursions and corrective actions will be detailed in the semi-annual CAM Plan Summary Report.

3. Monitoring Frequency (45 CSR 2A §6.3.a.3):

Under the CAM Plan, total Secondary ESP power input (in kW) is calculated and recorded no less than four times per hour, equally spaced over each hour, in an electronic data acquisition system and averaged on a 3-hour basis.

4. Monitoring Parameters:

45 CSR 2A §6.3.a.4 Nominal Range of Input Parameters ESP Power (kW) range: 0 to 1600 kW

45 CSR 2A §6.3.a.6 Explanation of how Nominal Ranges were chosen

ESP power range is based on specifications of the precipitator.

45 CSR 2A §6.3.a.5 Explanation of Chosen Input Parameter and how it is Indicative of Compliance

In August 2008, CAM testing was conducted at Pleasants power station for the purpose of determining minimum ESP power levels that were in compliance with the TSP emission rates. Power input data (based on secondary voltage and secondary current) for each field of the ESP was collected during the full range of normal daily operations, in accordance with the WVDEP approved CAM test protocol. A TEOM 7000 Source Particulate Sampler was used to collect representative short-term continuous TSP samples. Minimum power levels for compliance were identified for each unit based on a 3-hour block average as follows:

Unit 1: 268 kW Unit 2: 270 kW

45 CSR 2A §6.3.a.8 Response Plan to be Implemented During Opacity Excursions

If ESP power drops below the minimum level identified for compliance, operators will investigate ESP performance and unit operating parameters to identify the cause and take necessary corrective action to restore precipitator power levels.

B. Auxiliary Stack

1. Applicable Standard: 10% opacity based on a six-minute block average 45 CSR 2, § 3.1.

2. Monitoring Method(s)

Pleasants Power Station has received approval from the Department of Air Quality (DAQ) Chief for alternative monitoring requirements and exemption from testing for the auxiliary boilers and the associated stack, pursuant to 45 CSR2 Section 8.4.a and 8.4.a.1. As an alternative to COMS monitoring, a Method 9 (visible emission) reading is conducted once a month provided the following conditions are met: 1) The auxiliary boiler has operated at normal, stable load conditions for at least 24 consecutive hours, and 2) weather/lighting conditions are conducive to taking proper Method 9 readings.

II. 45 CSR 2 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

- 1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as determined in 45 CSR 2A, § 7.1.a.
- 2. Pipeline quality natural gas only, If used: such record shall include, but not limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis as determined in 45 CSR 2A, § 7.1.a.1.
- 3. Distillate oil only: such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis as determined in 45 CSR 2A, § 7.1.a.2.

- 4. Coal only: such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and an ash, BTU and sulfur content analysis for each shipment as determined in 45 CSR 2A, § 7.1.a.4.
- 5. Alternative, and/or opportunity fuel(s): such records shall include, but not be limited to, the date and time of start-up and shutdown, and fuel quality analysis as approved by the director as determined by 45 CSR 2A, § 7.1.a.5.
- 6. Combination of fuels: the owner or operator shall comply with the applicable recordkeeping requirements of §s 7.1.a.1 through 7.1.a.5 for each fuel burned as determined in 45 CSR 2A, § 7.1.a.6.

B. Record Maintenance

1. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) Years from the date of monitoring, sampling, testing, measurement and reporting. Support information includes all calibration and maintenance records, electronic data files, and copies of all required reports.

C. Exception Reporting

1. A semi-annual CAM report is submitted for the main boilers by March 15 and September 15 as an attachment to the Title V 6-Month Monitoring Report and Annual Compliance Certification report. The report shall include the following:

45 CSR 2A §7.2.c.3.A The starting and ending times of each excursion (ESP power below minimum level)

45 CSR 2A §7.2.c.3.B Specific identification of each excursion that occurs during startups, shutdowns and malfunctions.

45 CSR 2A §7.2.c.3.C. The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).

45 CSR 2A §7.2.c.3.D. The date and time identifying each period during when data is unavailable, and the reason for data unavailability and the corrective action taken.

45 CSR 2A §7.2.c.3.E. When no excursions have occurred or there were no periods of data unavailability, such information shall be stated in the report.

To the extent that that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 shall be followed. Ref. 45 CSR 2A, § 7.2.d.

- 2. Pursuant to 45 CSR 2, Section 8.4.a and 8.4.a.1, Pleasants Power Station has received approval from the Department of Air Quality (DAQ) Chief for alternative testing, monitoring, and reporting requirements for the auxiliary boilers and associated stack.
 - a. As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boilers, fuel analysis records are maintained as per the fuel quality analysis and recordkeeping section of this plan to provide sufficient evidence of compliance with the particulate mass emission limit. For the purpose of meeting exception reporting requirements for fuel oil, any fuel oil analysis indicating a heat content of less than 25,000 Btu/gallon will be reported to the DAQ to fulfill the requirement for a periodic exception report under 45 CSR 2 Section 8.3.b. and 45 CSR 2A, § 7.2.a. A heat content of 25,000 Btu/gal and a particulate emissions factor of 2 lbs/thousand gallons would result in a calculated particulate mass emissions of approximately 90% of the applicable 45 CSR 2 weight emission standard. Ref. 45 CSR 2, § 4.1.b.
 - b. As an alternative to the exception reporting requirements for opacity emissions from the auxiliary boilers, we are proposing to maintain a copy of each properly conducted (appropriate weather and lighting conditions, etc.) Method 9 evaluation onsite. Any properly conducted Method 9 test that indicates an exceedance shall be submitted to the DAQ on a quarterly basis (within 30 days of the end of the quarter) along with an accompanying description of the excursion cause, any corrective action taken, and the beginning and ending times for the excursion.

To the extent that an excursion is due to a malfunction, the reporting requirements of 45 CSR 2 Section 9 shall be followed. Ref. 45 CSR 2A, § 7.2.d.

Monitoring and Recordkeeping Plan 45 CSR 2 and 45 CSR 10 <u>Utility Boilers</u>

Facility Information:

Facility Name: Willow Island Power Station

Facility Address: Willow Island Power Station

State Route 2, No. 2 Power Station Blvd

Willow Island, WV 26134

Facility Contact: Dale E. Evans

Director, Pleasants Plant Telephone (304) 665-3244 FAX # (304) 665-3282

Manager Air Quality: Mark A. Sowa

800 Cabin Hill Drive

Telephone (724) 838-6133

Facility Description: (Plant ID # 7300004)

Willow Island Power Station is a coal-fired electric generating facility with two main combustion units (Units 1 & 2) with in-service dates of 1949 and 1960 respectively, discharging through two individual stacks. Stacks 1 & 2 each have a height of approximately 215.6', with an outlet diameter of approximately 18.3'. There are no cooling towers. Each unit has an electrostatic precipitator (ESP) with 99.6% removal efficiency. Willow Island Power Station has two auxiliary boilers (3A and 3B) with a common auxiliary stack. Each unit has a design heat input greater than 10mmBtu/hr making them subject to 45CSR 2 and 45 CSR 10.

I. 45 CSR 2 Monitoring Plan:

In accordance with §. 8.2A of 45 CSR 2, the following proposed plan is for monitoring compliance with opacity limits found in § 3 of that rule:

A. Stacks 1 and 2

- 1. Applicable Standard: 10% opacity based on a six-minute block average 45 CSR 2, § 3.1.
- 2. Monitoring Methods(s)
 - a. The primary method for monitoring opacity at the Willow Island Power Station will be Continuous Opacity Monitors (COMS). The

COMS are installed, maintained and operated in compliance with 40 CFR Part 60 (NSPS) and Part 75 (Acid Rain).

Other Credible Monitoring Method(s): Willow Island Power Station is reserving the right to use Method 9 readings, or any other appropriate method that would produce credible data. These "other monitoring methods" will generally be used in the absence of COMS data or as other credible evidence used in conjunction with COMS data If used, Method 9 readings, with a minimum duration of 30 minutes, will be conducted daily when following conditions are met: 1) The auxiliary boiler has operated at normal, stable load conditions for at least 24 consecutive hours, and 2) weather/lighting conditions are conducive to taking proper Method 9 readings.

B. Auxiliary Stack

- 3. Applicable Standard: 10% opacity based on a six-minute block average 45 CSR 2, § 3.1.
- 4. Monitoring Method(s)

Willow Island Power Station is exempt from the periodic testing requirements of 45 CSR 2 Section 8.1.a and the monitoring requirements of 45 CSR 2 Section 8.2 with respect to the auxiliary boilers, based upon a design heat input of 19.89 mmBtu/hr for each unit. Ref. 45 CSR 2 Section 8.4.c.

II. 45 CSR 10 Monitoring Plan:

In accordance with \S 8.2c of 45 CSR 10, following is the proposed plan for monitoring compliance with the sulfur dioxide weight emission standards expressed in \S 3 of that of that rule:

A. Stacks 1 and 2

- 1. Applicable Standard: The product of 2.7 and the total design heat inputs for all units discharging through the stacks in million BTU's per hour. Compliance with the SO₂ limit is based on a continuous 24-hour averaging time, 45 CSR 10, § 3.1c.
- 2. Primary Monitoring Method: The primary method of monitoring SO₂ mass emissions from Stacks 1, 2 and 3 will be Continuous Emission Monitors (CEMS). The CEMS are installed, maintained and operated in compliance with 40 CFR Part 75. As specified in 45 CSR 10,

 § 8.2.c.1, measurement with a certified CEMS shall satisfy the monitoring plan requirements.
- 3. Other Credible Monitoring Methods: While CEMS is the primary monitoring method, in the absence of CEMS, we reserve the right to use

ASTM compliant fuel sampling and analysis or any other appropriate method that would produce credible data.

B. Auxiliary Stack

- 1. Applicable Standard: The product of 3.1 and the total design heat inputs for Type "b" fuel burning units, discharging through the stacks in million BTU's per hour. Compliance with the SO2 limit is based on a continuous 24-hour averaging time. Ref 45 CSR 10, § 3.1.e and 3.8.
- 2. Monitoring, Recordkeeping, and Exception Reporting Requirements: The Willow Island Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45 CSR 10, § 8 in accordance with 45 CSR 10 § 10.3 because the fuel burning sources combust either natural gas, distillate oil, or a combination of the two. 45 CSR 10, § 3.8 also contains the requirement for the development of a monitoring plan. Because the burning of distillate oil results in an SO2 emission rate well below the standard, fuel sampling and analysis may continue to be performed at this facility, but will be done so at the discretion of the owner/operator. Because the burning of natural gas results in negligible SO2 emission rates, fuel sampling and analysis of natural gas will not be performed. It is not required by this monitoring plan for the purposes of indicating compliance of the auxiliary boilers with SO2 standards.

III. 45 CSR 2 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

- 1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule, and the quality and quantity of fuel burned in each fuel burning unit as determined in 45 CSR 2A, § 7.1.a.
- 2. Pipeline quality natural gas only, If used: such record shall include, but not limited to, the date and time of start-up and shutdown, and the quantity of fuel consumed on a monthly basis as determined in 45 CSR 2A, § 7.1.a.1.
- 3. Distillate oil only: such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a monthly basis as determined in 45 CSR 2A, § 7.1.a.2.
- 4. Coal only: such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis and an ash, BTU and sulfur content analysis for each shipment as determined in 45 CSR 2A, § 7.1.a.4.

- 5. Alternative, and/or opportunity fuel(s): such records shall include, but not be limited to, the date and time of start-up and shutdown, and fuel quality analysis as approved by the director as determined by 45 CSR 2A, § 7.1.a.5.
- 6. Combination of fuels: the owner or operator shall comply with the applicable recordkeeping requirements of §s 7.1.a.1 through 7.1.a.5 for each fuel burned as determined in 45 CSR 2A, § 7.1.a.6.

B. Record Maintenance

1. Records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) Years from the date of monitoring, sampling, testing, measurement and reporting. Support information includes all calibration and maintenance records, strip charts, and copies of all required reports. In the case of auxiliary boilers, strip chart recordings, etc., are generally not available.

C. Exception Reporting

- 1. Compliance with the reporting and testing requirements under the Appendix to 45 CSR 2 shall fulfill the requirement for a periodic exception report under subdivision 8.3.b or 45 CSR 2-45 CSR 2A, § 7.2.a.
- 2. COMS: "Summary Report and/or Monitoring System Performance Report": Each owner or operator employing COMS as the method for monitoring opacity shall submit a summary report and /or an excursion and COMS monitoring system report to the Director on a quarterly basis (within 30 days of the end of the quarter). The Director may require more frequent reporting if deemed necessary to accurately assess compliance. The COMS summary report will be in an already established format, or one specified by the Director.
 - a. If the duration of excursions for the reporting period is less than one percent (1%) of the total operating time and monitoring system downtime for the reporting period is less than five percent (5%) of the total operating time, the summary report shall be submitted to the Director, the excursion and COMS monitoring system report shall be maintained on-site and shall be submitted to the Director upon request. Ref 45 CSR 2A, § 7.2.b.1.
 - b. If the total duration of excursions for the reporting period is one percent (1%) or greater of the total operating time, or total monitoring system downtime for the reporting period is five percent (5%) or greater, both reports shall be submitted to the Director. Ref 45 CSR 2A, § 7.2.b.2.
 - c. The excursion and COMS monitoring system report shall be in a format approved by the Director and shall include, but not be

- limited to the following information. Ref 45 CSR 2A, §s. 7.2.b.3, 7.2.b.3.A, B, C, D, and E.
- d. The magnitude of each excursion, including the date and time, and the starting and ending times of each excursion.
- e. Specific identification of each excursion that occurs during startups, shutdowns and malfunctions.
- f. The nature and cause of any excursion (if known), and the corrective action taken and preventative measures adopted (if any).
- g. The date and time identifying each period during which quality controlled (assured) monitoring data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of repairs or adjustments to the monitoring system.
- h. When no excursions have occurred or there were no periods of quality controlled data unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report.
- 3. Non-COMS Based Monitoring, Summary Report and Excursion Report. Each owner or operator employing non-COMS based monitoring shall submit a monitoring summary report and/or an excursion report to the Director on a quarterly basis (within 30 days of the end of the quarter). The Director may request more frequent reporting if deemed necessary to accurately assess the compliance of the units. The report shall be in a format approved by the Director. Ref. 45 CSR 2A, § 7.2.c.
 - a. If the total number of excursions for the reporting period is less than one percent (1%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan, the monitoring summary report shall be submitted to the Director, and the excursion report shall be maintained on-site and shall be submitted to the Director upon request. Ref 45 CSR 2A, § 7.2.c.1.
 - b. If the number of excursions for the reporting period is one percent (1%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater, the monitoring plan summary report and the excursion report shall both be submitted to the Director. Ref 45 CSR 2A, § 7.2.c.2.
 - c. The excursion and monitoring plan report shall be in a format approved by the Director and shall include, but not be limited to,

the information as outlined in Paragraph C.2.d, e, f, g, and h of this plan.

- d. To the extent that an excursion is due to a malfunction, the reporting requirements in section 9 of 45 CSR 2 shall be followed. Ref. 45 CSR 2A, § 7.2.d.
- 4. Pursuant to 45 CSR 2, Section 8.4.a, Willow Island Power Station is petitioning the Office of Air Quality (OAQ) Chief for alternative reporting requirements for the auxiliary boiler and associated stack.
 - a. As an alternative to the testing and exception reporting requirements for particulate mass emissions from the auxiliary boilers, we propose that the fuel analysis records maintained under the fuel quality analysis and recordkeeping section of this plan provide sufficient evidence of compliance with the particulate mass emission limit. Based on an average heat content (distillate oil) of approximately 139,000 Btu/gallon and an AP-42 based particulate mass emissions emission factor of 2 lbs/thousand gallons, the calculated particulate mass emissions of the auxiliary boilers are 0.01 lb/mmBtu for each boiler. Based on an average heat content (natural gas) of approximately 1,000 Btu/scf and an AP-42 based filterable PM emission factor of 1.9 lb/Mcf, the caucluated particulate mass emissions of the auxiliary boilers are 1.9 lb/mmBtu for each boiler. Hence, it is estimated that each boiler has a total calculated particulate mass emissions of approximately 1.91 .b/mmBtu per year. For the purpose of meeting exception reporting requirements for fuel oil, any fuel oil analysis indicating a heat content of less than 25,000 Btu/gallon will be reported to the OAQ to fulfill the requirement for a periodic exception report under 45 CSR 2 Section 8.3.b. and 45 CSR 2A, § 7.2.a. A heat content of 25,000 Btu/gal and a particulate emissions factor of 2 lbs/thousand gallons would result in a calculated particulate mass emissions of approximately 90% of the applicable 45 CSR 2 weight emission standard. Ref. 45 CSR 2 Section 4.1.b.
 - b. To the extent that an excursion is due to a malfunction, the reporting requirements of 45 CSR 2 Section 9 shall be followed. Ref. 45 CSR 2A, § 7.2.d.

If no exceptions have occurred during the quarter, then a report will be submitted to the OAQ stating so. This will include periods in which no Method 9 tests were conducted (e.g. unit out of service) or when no fuel oil was received.

IV. 45 CSR 10 Recordkeeping and Reporting Plan

A. Operating Schedule and Quality/Quantity of Fuel Burned

- 1. The owner or operator of a fuel burning unit(s) shall maintain records of the operating schedule and the quality and quantity of fuel burned in each unit. Such records shall include, but not be limited to, the date and time of start-up and shutdown, the quantity of fuel consumed on a daily basis, and a periodic fuel quality analysis as set forth below. Ref. 45 CSR 10 A, § 7.1.a:
- a. $\geq 90\%$ of Factor daily
- b. <90% of Factor per shipment

The owner or operator shall provide in the monitoring plan a quality control and quality assurance program for the fuel analysis. If a certified independent laboratory is used to provide the fuel analysis, the quality control and assurance program is deemed to be satisfactory. Ref. 45 CSR 10A, §7.1.a.1.

c. The owner/operator of fuel burning units utilizing CEMS shall be exempt from the provisions of 7.1.a and 7.1.b. Ref. 45 CSR 10A, §7.1.c.

B. Record Maintenance

1. For fuel burning units, and combustion sources, records of all required monitoring data and support information shall be maintained on-site for a period of at least five (5) years from the date of monitoring, sampling, measurement or reporting. Support information includes all calibration and maintenance records and all strip chart recordings, and copies of all reports. Ref. 45 CSR 10A, \$ 7.1.d.

C. Exception Reporting

- 1. CEMS each owner or operator employing CEMS for an approved monitoring plan shall submit a CEMS summary report and/or an excursion report quarterly (within 30 days of end of quarter) to the Director. The Director may request more frequent reports if deemed necessary to assess compliance of the units. The CEMS report shall be submitted in a format approved by the Director, or as specified by the Director. Ref 45 CSR 10A, § 7.2.a
 - a. Submittal of 40 CFR Part 75 data in electronic data reporting (EDR) format to the Director shall be deemed to satisfy the requirements of Section 7.2.a. Ref 45 CSR 10A, § 7.2.a.1
- 2. If the total duration of excursions for the reporting period is less than four percent (4%) of the total source operating time for the reporting period and the total monitoring method downtime for the reporting period is less than five percent (5%) of the total source operating time for the reporting period, only the CEMS summary shall be submitted. The excursion summary shall be maintained on-site and shall be submitted to the Director upon request. Ref 45 CSR 10A, § 7.2.a.2.

- 3. If the total duration of excursions for the reporting period is four percent or greater of the total operating time for the reporting period or the total monitoring method downtime for the reporting period is five percent (5%) or greater of the total operating time for the reporting period, the CEMS summary report and the excursion report shall both be submitted to the Director. Ref. 45 CSR 10A, § 7.2.a.3.
- 4. The CEMS excursion and monitoring report shall be in format approved by the Director and shall include the following information. Ref. 45 CSR 10 A, § 7.2.a.4.
 - a. The magnitude of each excursion, and the date and time, including starting and ending times of each excursion. Ref. 45 CSR 10A, § 7.2.a.4.A.
 - b. Specific identification of each excursion that occurs during startups, shutdowns, and malfunctions of the facility. Ref. 45 CSR10A, § 7.2.a.4.B.
 - c. The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted. Ref. 45 CSR 10A, § 7.2.a.4.C.
 - d. The date and time identifying each period during which quality assured data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system. Ref. 45 CSR 10A, § 7.2.a.4.D.
 - e. When no excursions have occurred or there were no periods of quality assured unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report. Ref. 45 CSR 10A, § 7.2.a.4.E.
- 5. Non-COMS based monitoring each owner or operator employing non COMS based monitoring shall submit a monitoring summary report and an excursion report to the Director on a quarterly basis (within 30 days of the end of the quarter). The Director may require more frequent reporting if deemed necessary to assess the compliance of the fuel burning units. The monitoring summary report shall contain the information and be in a format approved by the Director. Ref. 45 CSR 10A, § 7.2.b.
 - a. If the total number of excursions for the reporting period is less than four percent (4%) of the total number of readings for the reporting period and the number of readings missing for the reporting period is less than five percent (5%) of the total number of readings agreed upon in the monitoring plan, the monitoring summary report shall be submitted to the Director, and the

- excursion report shall be maintained on-site and shall be submitted to the Director upon request. Ref. 45 CSR 10A, § 7.2.b.1.
- b. If the number of excursions for the reporting period is four percent (4%) or greater of the total number of readings for the reporting period or the number of readings missing for the reporting period is five percent (5%) or greater, the monitoring plan summary report and the excursion report shall both be submitted to the Director. Ref 45 CSR 10A, § 7.2.b.2.
- 6. The CEMS excursion and monitoring report shall be in format approved by the Director and shall include the following information. Ref. 45 CSR 10 A, § 7.2.b.3.
 - a. The magnitude of each excursion, and the date and time, including starting and ending times of each excursion. Ref. 45 CSR 10A, § 7.2.b.3.A.

 - c. The nature and cause of any malfunction (if known), and the corrective action taken and preventive measures adopted. Ref. 45 CSR 10A, § 7.2.b.3.C.
 - d. The date and time identifying each period during which quality assured data was unavailable, except for zero and span checks, and the reason for data unavailability and the nature of the repairs or adjustments to the monitoring system. Ref. 45 CSR 10A, § 7.2.b.3.D.
 - e. When no excursions have occurred or there were no periods of quality assured unavailability, and no monitoring systems were inoperative, repaired, or adjusted, such information shall be stated in the report. Ref. 45 CSR 10A, § 7.2.b.3.E.

D. Auxiliary Stack Recordkeeping and Reporting

1. Recordkeeping, and Exception Reporting Requirements: The Willow Island Power Station auxiliary boilers (and stack) are exempt from the Testing, Monitoring, Recordkeeping, and Reporting requirements found under 45 CSR 10, § 8 because the fuel burning unit(s) combust natural gas and/or distillate oil. Ref 45 CSR 10, §10.

APPENDIX C

Willow Island Power Station Consent Order

(Tire Derived Fuel (TDF) # CO-R13-99-39)



Office of Air Quality

1558 Washington Street, East Charleston, WV 25311 Telephone Number: (304) 558-4022 Fax Number: (304) 558-3287



West Virginia Division of Environmental Protection

Cecil H. Underwood Governor Michael C. Castle Director

DIVISION OF ENVIRONMENTAL PROTECTION OFFICE OF AIR QUALITY 1558 Washington Street, East Charleston, West Virginia 25311

v.

CO-R13-99-39 Plant ID # 073-0004

MONONGAHELA POWER COMPANY d.b.a. ALLEGHENY POWER 800 CABIN HILL DRIVE GREENSBURG, PA 15601

CONSENT ORDER

This Consent Order is entered under the authority and direction of Chapter 22, Article 5, Section 4 of the West Virginia Code.

I. FINDINGS OF FACT

- 1. Monongahela Power Company ("Company"), a wholly owned subsidiary of Allegheny Power, operates a coal-fired electric generation facility known as Willow Island Power Station ("Facility") located at Willow Island, West Virginia.
- 2. The Facility includes two (2) units, Unit 1 a 55 MW top fired boiler and Unit 2 a 190 MW cyclone fired wet bottom boiler.
- 3. On February 25, 1998, the Office of Air Quality ("OAQ") received correspondence from the Company dated February 23, 1998, requesting permission to conduct a Tire Derived Fuel ("TDF") test burn at the Facility's Unit No.2 cyclone boiler, using approximately 300 tons of 1-1/2 inch nominal TDF.
- 4. On May 1, 1998, the Company submitted for review two copies of the test results for the TDF test burn, which consisted of results at multiple generation and boiler loading.
- 5. On May 5, 1999, the Office of Air Quality received correspondence from the Company dated May 3, 1999, requesting permission to conduct a TDF test burn at the Facility's Unit 2, using 2 inch nominal, 3 inch maximum TDF product, and burning approximately 300 tons of TDF.



- 6. On May 19, 1999, the OAQ issued an executed Consent Order, (CO-R13-99-19) granting the Company permission to conduct a TDF test burn.
- 7. On July 21, 1999, The Company submitted for review, two copies of the test results for the TDF test burn in accordance with CO-R-13-99-19.

II. CONCLUSIONS OF LAW

- 1. The Division of Environmental Protection ("Division") is the agency empowered and authorized to regulate and control air pollution in the State of West Virginia as set forth in the West Virginia Code.
- 2. The Chief ("Chief") of the OAQ is empowered to implement and enforce the regulations of the Division.
- 3. The Chief has acted in accordance with the West Virginia Code.
- 4. The Facility is subject to the jurisdiction of OAQ for the purposes specified in this Consent Order, to conduct an ongoing "Pilot Project" to burn TDF at Willow Island Power Station, unit #2.

III. COMPLIANCE PROGRAM

- 1. The Company hereby agrees to comply with the West Virginia Code § 22-5, 45 CSR 13 "Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation", 45 CSR 2 "To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers", and 45 CSR 10 "To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides."
- 2. The Company will continuously monitor sulfur dioxide (SO_2) emissions, nitrogen oxide (NO_x) emissions, carbon dioxide (CO_2) emissions, volumetric flow rates, and opacity through the use of a certified Continuous Emission Monitoring System (CEMS) and Continuous Opacity Monitoring System (COMS). Carbon monoxide (CO) shall be monitored by existing equipment that is maintained and calibrated and/or by calculation of CO emissions by methods agreed to by the Chief.
- 3. The Company shall establish a baseline for emissions of SO₂, NO_x, CO₂, particulate matter, and CO by determining the hourly average emission during the most recent past five year period (historical data) for use in determining any future increase in emissions and determining 45 CSR 14 (PSD) or 45 CSR 13 permit applicability.
- 4. Prior to commencing the use of TDF, the Company will conduct emission tests to determine emissions of particulate matter and CO to confirm baseline data, methods of calculation, and accuracy of existing monitors. Data for SO₂, NO_x, and CO₂ obtained pursuant to 45 CSR Part 75 shall be deemed acceptable as baseline data.

- 5. The Company shall conduct or have conducted a stack test for particulate and CO emissions with in ninety (90) days of commencing the use of TDF. Thereafter, on no less than an annual basis the Company shall conduct or have conducted a stack test for particulate and CO emissions in conjunction with a CEMS relative accuracy test audit (RATA), and within forty-five (45) of completion of tests shall submit the report of test results to the Chief of the OAQ.
- 6. The Company will monitor and record daily, the consumption of coal and TDF burned in unit #2 cyclone boiler, and the data shall be kept on site for a period no less than 5 years, and submitted to the Chief of the OAQ quarterly within 30 days of the end of each calendar quarter.
- 7. The Company shall conduct or have conducted an ultimate analysis on a representative sample of the TDF on a semi-annual basis. The results data will be kept on site for no less than 5 years and submitted to the Chief of the OAQ within 30 days of receiving data.
- 8. The Company shall conduct or have conducted on a quarterly basis an analysis for total metals, including zinc, on a representative sample of the flyash produced. A minimum of one such analysis shall be performed on a representative sample collected during the annual RATA pursuant to acid rain requirements pursuant of 40 CFR Part 75. The results shall be kept on site no less than 5 years and shall submitted to the Chief of the OAQ within 30 days of the end of each calendar quarter.
- 9. The Company shall consume TDF at a maximum 3" nominal in size, or smaller, in accordance with industry standards for sizing TDF.
- 10. The Company will amend its Title V application for Willow Island Power Station to include the burning of TDF as an alternate fuel.
- 11. The Company shall not burn a fuel combination that consists of greater than 10% of TDF by weight based on forty-eight hour averages.
- 12. This Consent Order shall terminate upon notification by the Company that it intends to permanently cease using TDF at the Willow Island Station, the Company ceases to use TDF for two (2) complete and consecutive years, a determination and notification to the Company by the OAQ that it has reason to believe that continued use of TDF is not environmentally sound, or such time that a permit or permit modification may be issued for a change in operation involving the use of TDF.
- 13. This Consent Order does not preclude the Company of its obligation to make a timely application for a permit pursuant to 45 CSR 13 and 45 CSR 14 should the data indicate applicability, nor does this consent agreement preclude the OAQ from enforcement action involving excess emissions resulting from the combustion of TDF.

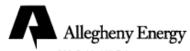
IV. OTHER PROVISIONS

- 1. The Company agrees to comply with all requirements of this Consent Order and further agrees to waive any and all rights of appeal of this Consent Order. However, the Company reserves its right to contest any enforcement actions with respect to all alleged violations of the terms and conditions of this Consent Order, or any modifications or amendments thereof.
- 2. Nothing contained in this Consent Order shall be interpreted in such a manner as to relieve the Company of the responsibility to make all necessary short-term emission reductions as provided and required in 45 CSR 11 "Prevention of Air Pollution Emergency Episodes".
- 3. The provisions of this Consent Order are severable and should any provisions be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.
- 4. The Chief agrees that the Company shall have the right to petition OAQ for an amendment to this Consent Order in the event of a "force majeure" condition. The petition shall state such force majeure condition with specificity. The Chief shall hear the Company's petition and determine the relief accorded, if any.
- 5. This Consent Order shall become effective immediately upon signing by both parties.
- 6. This Consent Order is binding on the Company, its successors and assigns.
- 7. Violations of this Consent Order may subject the Company to penalties in accordance with W.Va. Code §22-5-6 and injunctive relief in accordance with W.Va. Code §22-5-7. This Consent Order shall serve as written notice of violation as contemplated in W.Va. Code §22-5-6 for failure to comply with each scheduled provision of Section III of this Consent Order.

AND NOW, this	day of	, 1999, the DIVISION OF
ENVIRONMENTAL PROTE Consent Order.	ECTION, OFFICE	OF AIR QUALITY agrees to and enters into this
		OFFICE OF AIR QUALITY
		Signed
		By Its CHIEF Edward L. Kropp
		Y, hereby agrees with the provisions and agrees to comply with all requirements set forth
		, 1999, MONONGAHELA POWER we, consents to, agrees to and enters into this
		MONONGAHELA POWER COMPANY
		Signed November 8, 1999 By
		Donald R. Feenstra
		Its Vice President, Energy Supply
		Generation Division

APPENDIX D

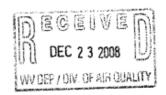
Pleasants Power Station Letter (Clarification of SCR Operation under Consent Order CO-SIP-C-2008-6)



DAVID C.CANNON JR. Vice President, Environment, Health & Safety 800 Cabin Hill Drive Greensburg, PA 15601 (724) 838-6709 FAX (724) 830-5142

December 22, 2008

Mr. John A. Benedict Director Division of Air Quality West Virginia DEP 601 57th Street, SE Charleston, WV 25304



Re: Consent Order No.: CO-SIP-C-2008-5

Facility ID NO.: 033-00015 (Harrison Power Station)

and

Consent Order No.: CO-SIP-C-2008-6

Facility ID NO.: 073-00005 (Pleasants Power Station)

Dear John:

Thank you for taking the time over the last several months to meet with me and other representatives of Allegheny Energy to discuss the above-referenced Consent Orders. In particular, we appreciate this opportunity to confirm the parties' intentions under the Consent Orders regarding the operational, maintenance and safety issues facing Allegheny Energy from year round operation of the SCRs at the Harrison and Pleasants Power Stations, commencing January 1, 2009. Further, Allegheny Energy can now outline for the Department our scheduled maintenance activities on the SCRs in 2009.

For the purpose of this letter, we are assuming that the Clean Air Interstate Rule (CAIR) is not vacated by the DC Circuit but rather remanded to EPA with appropriate instructions. As Allegheny Energy advised the Department, should the *en banc* court vacate CAIR, the parties will need to discuss further what are Allegheny Energy's obligations under the Consent Orders. Even amidst this legal uncertainty, it is important to clarify how the operations and maintenance requirements for the SCRs will affect running those controls under our agreements.

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SCR Operating Requirements

As we have advised, the original equipment manufacturers for the SCRs at Harrison and Pleasants have set forth minimum flue gas temperatures at which the SCRs may be safely and effectively operated. If the flue gas temperature drops below the minimum and ammonia continues to be injected into the SCR, the catalyst would suffer significant and permanent degradation, as well as create an unsafe work environment for our employees. Moreover, once the SCR is taken off line, the conversion of the urea to ammonia process requires between eight and twelve hours for reheating and reactivating. The flue gas temperature is based upon the load in the boiler which is based upon demand for electricity. Therefore, to the extent there is insufficient demand, the load in the boiler is reduced to the point where the flue gas temperature falls below the minimum temperature requirement and the SCR cannot function. Thereafter, the SCR cannot be restarted unless the unit demand going forward will create flue gas temperatures in excess of the minimum requirements for a period of time sufficient to complete the urea to ammonia process and then effectively, reliably and safely operate the SCR. The parties have discussed these scenarios, and Allegheny Energy and the Department have agreed that under the terms of the Consent Order, Allegheny is not required to operate the unit's SCR at the following times even though the unit is operating:

- when such unit's flue gas temperature drops below 613°F at any point along the catalyst layer; or
- for periods of up to twelve hours to allow for the reheating and reactivating of the urea to ammonia conversion process when the flue gas temperatures of the units at a facility have fallen below 613°F.

SCR Maintenance

Each of the SCRs at Harrison and Pleasants contains three layers of catalyst. As you know, the catalysts wear out over time and need to be regenerated and/or replaced. This will become more frequent with the extended operation of the SCRs. The layers of catalyst for the SCRs at Harrison units 2 and 3 were

Mr. John A. Benedict December 22, 2008 Page 3

regenerated and/or replaced during the Fall of 2008. The SCR for Harrison Unit 1 will be taken out of service in early February, 2009 for one of the catalyst layers to be replaced and two layers to be regenerated. The SCR then will be brought back in service when unit 1 returns from an extended outage in April, 2009. The SCR for unit 1 at Pleasants will be taken out of service for approximately three weeks in the First Quarter of 2009 (currently scheduled to commence in January) for one of the catalyst layers to be replaced. The SCR for unit 2 at Pleasants will be taken out of service for approximately eight weeks in the Fall of 2009 for two of the catalyst layers to be replaced and one layer to be regenerated. More importantly, these replacement and regeneration projects will restore the SCRs to their maximum efficiency thus resulting in a higher net NOx removal during 2009.

We appreciate the Department's cooperation with respect to the operation of the SCRs under the above-referenced Consent Orders and we look forward to continued open lines of communication in the future. Please feel free to call me with any thoughts or questions.

Sincerely,

David C. Cannon Jr. DIF

Vice President

Environment, Health & Safety